MAXIM INSTITUTE

3. DISCUSSION PAPER

THE HEART OF POVERTY
UNCOVERING PATHWAYS INTO AND OUT OF DISADVANTAGE IN NEW ZEALAND

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THE HEART OF POVERTY: UNCOVERING PATHWAYS INTO AND OUT OF DISADVANTAGE IN NEW ZEALAND

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The paper in summary...

To cut away the destructive roots of persistent and intergenerational poverty in New Zealand, we first need to uncover them. This paper, the third in the Heart of Poverty series, is a comprehensive review of all we know about the pathways into and out of poverty for this generation and for those to come.

We start our journey towards recommendations in Sections 1, 2, and 3 by laying a foundational base of context, definitions, measurements, and causal theory.

We discuss here the key concept that **poverty is best understood as a dynamic relationship between resources and needs**—both rise and fall over time. If a family's resources fall or their needs rise (or both) to a level that leaves them unable to participate in society, they are considered to be in poverty.

Sections 4, 5, and 6 deal broadly with poverty within lifetimes—persistent poverty. For us to trace causal pathways, we need to look at how families' experiences of poverty change over time. We see the impact of trigger events and life shocks that push families into poverty and show how poverty is "simultaneously fluid and characterised by long-term traps."[†]

Analysis into "trigger events" showed that work events like losing a job or benefit that tend to reduce resources often combine with family events like separation or birth of a child that tend to increase needs. **Work events are much more common than family events, but family events tend to hit with greater impact.** More broadly speaking, life shocks like a marriage break up or a serious illness/injury can accumulate, potentially reaching a tipping point where they become too numerous and intertwined for a family to overcome.

Some groups are particularly vulnerable. **Being a sole parent, having no educational qualifications, and being part of an ethnic group other than New Zealand European are the most potent risk factors associated with persistent poverty.** Living in a benefit-dependent household and in a Housing New Zealand house also put families at significant risk.

There is good evidence that **"the poor" are not a fixed group.** Even if the headline poverty figure remained the same from one year to the next, many of the people captured by that measurement would be different; some would have shifted out of poverty, while others have shifted in. Taking a long term perspective, research shows that most people who fall into poverty are there for a short spell with limited consequences.

The longer a family experiences poverty, the more likely it is that they will endure greater levels of hardship and more severe poverty, and less likely that they will escape. This cumulative impact that tends to scar deeply is why **our greatest concern should lie with families trapped in persistent poverty.** Around sixteen percent of New Zealanders experience persistent poverty at any one time.

Sections 7 and 8 deal with poverty across generations—intergenerational poverty. Just as persistent poverty is a focus for families now, intergenerational poverty is of serious concern for families of the future. Poverty in one generation increases the chance of poverty in the next, wasting human potential and undermining our shared sense of a "fair go."

Looking across generations, **we found that poverty experienced during childhood matters for future economic and educational outcomes, but the evidence suggests that the independent effect is small to modest.** As one scholar put it, "the things that change when income increases have only a modest effect on outcomes, while the things that have a large effect on outcomes change only a little when income increases."[‡] A wider set of parental characteristics including the home environment, family aspirations and child behaviour are relatively more important.

In Section 9, we pull together evidence from the previous sections and our two headline pathways to poverty, alongside broad policy directions that amount to a renewed focus on improving the lives of struggling families now and in the future, through work and education.

Worklessness and low earnings are the primary drivers of poverty for families now. We identified that "low parental qualifications, drug and alcohol dependency, parental and child health problems, and family size and instability" all influence parents' ability to attain and keep a well-paid, stable job to provide for their family, and participate in the economy and society.

To help improve families' employment outcomes, we recommend:

- Investigating job retention strategies
- Developing skills for those with low skills and poor qualifications
- Expanding flexibility of working hours and accessibility of childcare
- Improving non-resident fathers' potential to support their children
- Promoting apprenticeships, on-the-job training and partnerships

Children's low educational attainment now is the primary driver of poverty for families in the future. We identified that "low parental qualifications, home environment (including parenting styles and aspirations), non-cognitive development, poor parental health and childhood poverty itself" all influence a child's potential for educational attainment and subsequent employment success.

To help boost children's educational achievement, we recommend:

- Shifting financial and in-kind support towards families with young children
- Investigating ways for schools to better push against socioeconomic barriers
- Developing childrens' social and emotional character skills
- Improving accessibility and quality of parenting programmes
- Adopting a more holistic, "two-generation" model of development

We conclude that our social security system serves most New Zealanders well, but is deeply failing to help those suffering persistent and intergenational poverty, who face a number of challenges and have complex needs. We need imagination to discern policies that go beyond "more money," collaboration to work across sectors and ideological divides, and the political will and bravery to pursue long-lasting change. It is our responsibility, as researchers and policy-makers, to help forge and refine a policy environment where these families have the opportunities and skills they need to flourish and participate in society, alongside hope that their lives can change for the better. More effective employment and education policies are the key to making this a reality.

† OECD, OECD Employment Outlook 2001 (2001), 37.

‡ Susan Mayer, *The influence of parental income on children's outcomes*, 67.

1. INTRODUCTION

Families in poverty face significant challenges and disadvantages that are likely to have scarring effects long into their children's futures, hindering their development and life chances. These children's children and their families may eventually bear this burden as well. For far too long our policy response to such persistent and intergenerational poverty has been an approach the Finance Minister has gone so far as to call "flying blind."[1] This is not good enough. To truly address poverty, policies need to be well-informed and based on sound evidence.

We have spent billions upon billions of dollars on social policies with surprisingly little evidence that we are targeting the spending efficiently or having any positive effect on reducing long-term disadvantage and increasing opportunities for families in need.[2] We haven't been mindful enough of what causes families to fall into poverty, and what it is that keeps them there, even into the next generation. To hack at the destructive roots of persistent and intergenerational poverty, we need to see and understand them more clearly.

Maxim Institute is engaged in a long-term project that aims to develop policy that will help those in or at risk of poverty—our families, friends, and fellow New Zealanders who are missing out on what most of us take for granted now and will suffer long-term consequences in the future.

The first two papers in the series explored the meaning, definition, and measurement of poverty.[3] This paper, the third in the series, seeks to discover the factors that cause poverty in New Zealand for this generation and for those to come.

We recognise that for policy to be well-tailored to helping people get out of poverty—or to ensure that people do not become trapped there in the first place—it must be mindful of the reasons people fall into and become trapped in poverty. Once we understand these pathways into poverty, we may recommend policies that will address these root causes and ultimately transform lives for the better. We also have an interest in the factors that help families escape poverty; not just pathways in, but doorways out, too. We hope that this work will help these families and their children to "thrive, belong, achieve," as the Government's vision for New Zealand children articulates.[4]

This work sits in a policy context that is increasingly aware of the need to seek sustainable answers to this intractable, "wicked" problem.[5] In a report to the Ministerial Committee on Poverty in 2013, Treasury recommended that New Zealand needed to "better understand the triggers that lead to people falling into persistent low income and deprivation . . . the [r]esilience factors that protect some people and /or help lift them out of low income and deprivation . . . [and] the causal links between low income, deprivation and individual characteristics."

The Expert Advisory Group, convened by the Children's Commissioner to identify solutions to poverty in New Zealand, also outline why this task is such an important one:[6]

"Understanding causal relationships is vital for a full understanding of the true costs of child poverty, and also for assessing how much other child outcomes would improve consequent on reducing child poverty. In addition, understanding the causal impact of family income on child outcomes goes to the heart of questions about best directions of resources in terms of investing in children. Is it better to spend on enhancing family incomes or purchasing services, such as early childhood education, on behalf of that child?"

To contribute to these questions on the way to better policy and better outcomes for New Zealanders, this paper will explore: the public perceptions of what causes poverty, persistence and mobility of income within and across generations, key factors that drive poverty within and across generations, trigger events that cause families to enter and exit poverty, and finally, risk and resilience factors that make families more or less vulnerable. All lead us to a clearer roadmap of the pathways into poverty, where we have found work and education to be the main routes out of lives of despair to lives of hope.

1.1 Concepts and limitations

For the clear vision we hope to achieve, the scope of this paper is limited in several ways:

- **Working-age families in poverty are the primary focus of this paper.**[7] Different causal pathways exist for different demographic groups. Around two-thirds of those in poverty in New Zealand are working-age families (sole and

couples) with children.[8] As they constitute the majority of people in poverty, there is a greater availability of data for this kind of family than for other demographic groups. Focusing on families with children also allows for investigation into the intergenerational effects of poverty. We are, therefore, interested in family poverty.[9]

- **We focus on proximate rather than distal causes for poverty.** The focus here is on factors closest to families, sometimes called proximate causes, rather than broader macro structural (also called distal) causes like globalisation, labour market factors, economic growth/stagnation, inequality, discrimination, demographic trends and policy reforms.[10] We recognise that factors like the number of jobs available, the nature of the benefit system, work incentives, and the returns to educational attainment, for example, matter deeply, yet the factors and events closest to families need to be understood first to focus and guide broader policy solutions.[11] Establishing whether losing work is a primary driver pushing families into poverty and how job losses happen is a pre-requisite for making labour market policy designed to alleviate poverty, for example. There is also more available data with fewer moving parts and confounding factors, making it a more manageable aspect of the research.

- **The findings in this paper are limited and drawn primarily from empirical research.** Much of the evidence here is quantitative, complemented with limited qualitative work where available.[12] While this means that much of the following work is based on empirical research, we conduct it with a rich, textured, and holistic understanding of people.[13] We understand that people hold values and desires and find meaning and fulfilment through relationships and deeply-held beliefs.[14] They also live with and depend upon their families, and families over time form intergenerational bonds. We recognise that the empirical research we rely upon—while crucial for giving us solid evidence of the characteristics and events that can have a strong impact on people's chances of falling into and remaining in poverty—is limited and does not fully explain a complex reality that we can only partially grasp through scientific methods. This work is therefore exploratory in nature. Evidence will be from New Zealand, where available.

1.2 Definition and measurement

- **We define poverty as a situation where: a person or family lacks the material resources to meet their minimal needs to participate in society, as recognised by most New Zealanders.*** Poverty is best understood as a dynamic relationship between resources and needs.† People use resources to meet their needs, and the scarring effects of hardship (going without) and social exclusion (inability to participate in society) are likely to result when these needs are not met.[15] More specifically:
  - **Material Resources** can be formal—that is, provided by the market or Government—or informal—provided by family, whānau, friends, neighbours, churches etc. There are two basic kinds:
    - Financial: Income, benefits, assets, material goods, charitable gifts etc.
    - In-kind: Health services, education, childcare from family, etc.
  - **Minimal Needs** are determined by what most New Zealanders consider necessary for a minimal acceptable standard of living to participate in society: a range of items or activities that no one should go without. These needs may be social or material and go beyond what's required for mere survival. The needs that are included are those that require material resources to fulfill (therefore the definition doesn't include the full breadth of human needs like meaningful relationships, for example). Needs change over time and differ depending on personal/family circumstances such as age, health, disability, geography, prices etc.

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* See Heart of Poverty: Defining and Measuring what it means to be poor in New Zealand for a more detailed discussion on the definition of poverty. [Footnote this]

† See Appendix 1 for a high level framework produced by the Department of Prime Minister and Cabinet, Ministry of Social Development (MSD), and the Treasury, depicting the myriad factors that influence how resources interact with needs.

- **We accept that income measures (usually involving some proportion of the median income) are an imperfect yet reasonable marker for poverty understood broadly as a lack of resources.**[17] There is no perfect measure of poverty as it is a multidimensional concept.[18] Much of the existing literature that will be drawn upon in this paper rests on this assumption, and due to the relative ease with which income data can be obtained these measures are also the most prominent. While hardship (also known as deprivation) measures are important because they track actual outcomes and day-to-day material living standards, the literature is limited from a causal perspective.[19] There is significant overlap across income and hardship measures—a relationship that strengthens over time and with severity—which means many of the income-based findings will be reasonably indicative of hardship as well. [20]

2. PUBLIC CONCEPTIONS OF CAUSES OF POVERTY

Before delving into what the experts say causes poverty, it is instructive to take a moment to consider public conceptions of the causes of poverty. In a democracy like New Zealand's, the public's perception of what causes of poverty is important because their views influence and shape policy.[21] A public that believes that poverty is caused predominately by the behaviour and choices of those in poverty will demand and accept very different poverty-fighting policies from its government than a public that believes that poverty is caused primarily by things outside of the control of those in poverty, such as bad luck or racism. As public health academic Margaret Whitehead notes, "[W]hen decisions are taken that 'something must be done' about a problem, the nature of the proposed action will depend on prevailing notions of what is causing the problem."[22]

2.1 Categories of causes of poverty

When asked to respond to a series of options that explain why people are poor, the public's answers can be classified into three categories: individualistic, structural, and fatalistic, as Table 1 shows:[23]

Table 1: Categories of public conceptions of causes of poverty

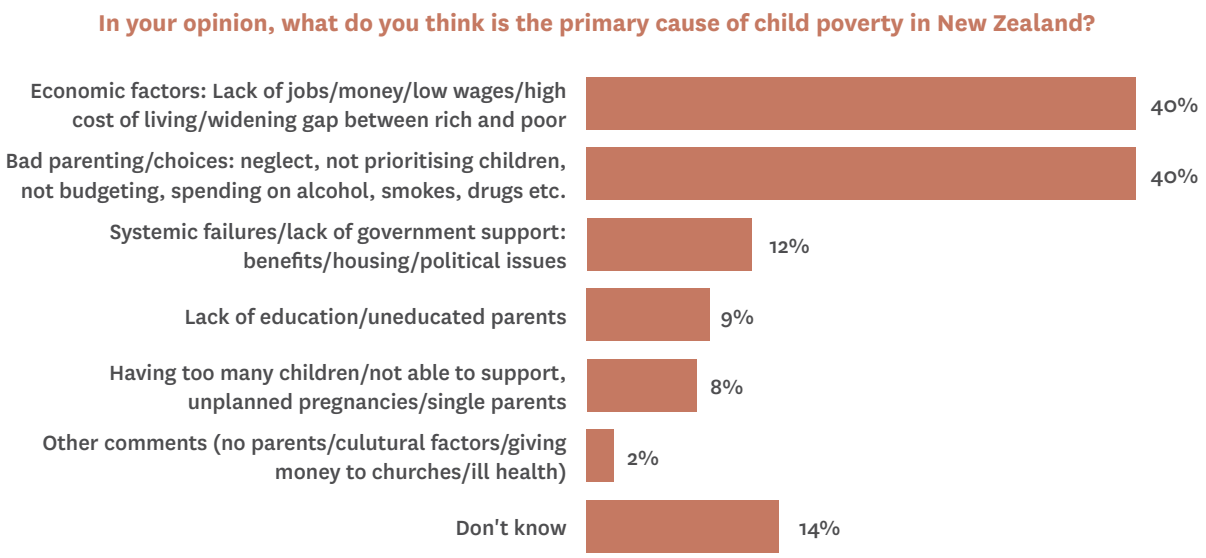
Category	Survey Response	Description
Individualistic	they are lazy and lack willpower	attributed responsibility for poverty to the behaviour and choices of the poor (families, sub-culture) themselves (for example, lack of thrift, unwillingness to work, problem drinking or drug abuse, dropping out of school, having children without the means to support them)
Structural	society treats them unfairly	attributed responsibility for poverty to external and economic forces (for example, low wages, unstable markets, technological change, no good schools, absence of jobs, prejudice and discrimination, badly designed policies (both ineffective or encouraging dependency))
Fatalistic	they have been unlucky	accounted for factors beyond the control of individuals, yet did not charge the society (such as bad luck, illness, or lack of ability)

Source: Dorota Lepianka, Wim Van Oorschot, and John Gelissen,"Popular explanations of poverty: *A critical discussion of empirical research*." Journal of Social Policy 38, no. 03 (2009): 423, 427 and Rebecca M. Blank "Selecting among anti-poverty policies: can an economist be both critical and caring?" *Review of Social Economy* 61, no. 4 (2003): 447-469.

2.2 Polling responses in New Zealand

In 2005, New Zealanders were asked whether people were poor because society treats them unfairly or because of laziness and lack of will power (only two options were presented).[24] Sixty percent of people surveyed responded that it was because of laziness and a lack of will power.[25] When asked whether most poor people have a chance to escape their situation or very little chance, over three-quarters of those surveyed responded that "most poor people a have a chance of escaping their poverty."[26]

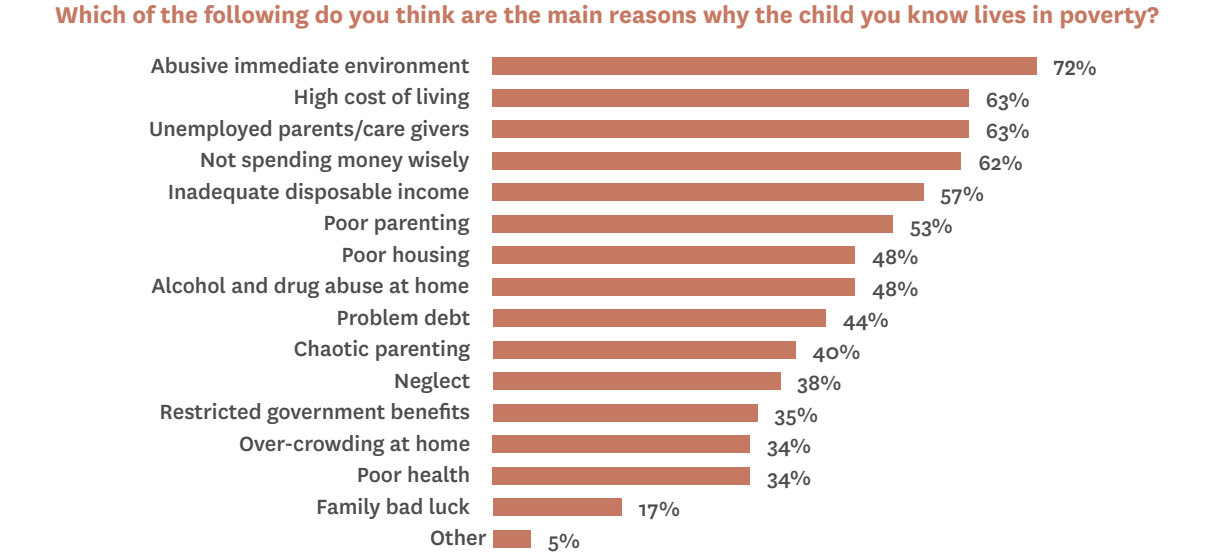
Figure 1: Public conceptions of the primary cause of poverty in New Zealand



Source: Child Poverty Action Group (CPAG), New Zealanders' attitudes to child poverty, Research Report (2014), 11.

More recently, the Child Poverty Action Group polled New Zealanders in more detail regarding their perceptions of poverty.[27] As Figure 1 depicts, there are broadly two camps split down the middle on the primary cause of poverty in New Zealand. One views structural factors—particularly economic—outside of people's control like unemployment, wages, and living costs as the main culprits, while the other views poverty as caused by individual characteristics and the behaviour of the poor themselves like bad choices, neglecting responsibilities and spending money on drugs and alcohol instead of the basics. Much smaller proportions of people, around one in ten for each, laid the blame on a lack of government support, uneducated parents, and families having too many children.

Figure 2: Public conceptions of the primary cause of poverty in New Zealand from those who knew a child in a poor household.



Source: CPAG, New Zealanders' attitudes to child poverty, Research Report, (2014), 23.

For a perspective grounded in personal experience, the same survey asked people whether they actually knew a child or children in poverty. Nearly a quarter (24 percent) said that they did. Figure 2 shows how when asked what the specific main reasons why the child they knew was in that situation, again we see an interesting split between structural and individualistic reasons.

2.3 Discussion of public perceptions

Findings from the UK suggest that personal experience of poverty significantly influences people's perception of its causes. Those with direct experience of being poor are more likely to view structural factors as more important while those without experience are more likely to believe people were personally responsible for their plight.[28] Research by Motu showed that Māori are also "more likely to believe: (a) people are in need because society is unfair; (b) government is doing too little to help people in poverty; (c) owners should not run businesses by themselves; (d) luck and connections matter more than hard work for success; (e) it is not fair to be paid more for better performance whilst doing the same job as someone else; and (f) capitalists are more threatening to society than other groups."[29] When you ask those in poverty in New Zealand what factors they think keeps them trapped in poverty, as the Auckland City Mission did last year, the answers are illuminating: debt, justice, housing, employment, health, food insecurity, services, and education; all exacerbated by the time required to navigate a complex system of support agencies and organisations.[30]

The broad array and distribution of answers again highlights how multi-faceted the problem of poverty appears and, at the same time, how polarised debate and opinion can become, as people tend to simplify a complex reality with false dichotomies—it's all the fault of the person in poverty, or it's all the fault of things outside of the person's control.[31] In reality, both perspectives are right.[32] The choices we make are constrained by our history and context.[33] We shall see below that the pathways into poverty aren't quite as clear-cut as popular polls and surveys might suggest.

3. CAUSATION

The surveys above asked the question, "What causes poverty?" But before we, as researchers and policy makers, can answer this question, we must first understand how causal relationships "work." Those familiar with the nature of causal relationships and the associated research methods may skip this section, as it serves as an introductory primer to the area.

Let's start with an example. Poverty is linked with almost every negative outcome imaginable, both now and in the future.[34] These span educational, health, economic, and social domains and include "brain and cognitive development, current and future mental and physical health, lifespan, child abuse and neglect, learning, future earnings, successful relationships, and so on."[35] The academic literature here is robust: there is a strong consensus that these relationships exist.

But just because poverty **is *related* to these negative outcomes, does not necessarily mean that poverty is the *primary cause* driving them.**[36] Causation, that is, *how* and *why* two factors are related, is much more difficult to come by than correlation. It isn't as simple as observing X occurring and watching Y result.

More generally, when two variables coincide, three possibilities arise:[37]

1. **Causation is not involved at all. X doesn't cause Y.** Sometimes, while two variables are related and follow one another there is no causal relationship. Spring, for example, always follows Winter, but Winter does not cause or produce Spring in any meaningful way.
2. **The observed relationship is a result of outside factors: Both X and Y are caused by something else.** Other times, something else causes the changes in the two variables. A notable example often used to illustrate this phenomenon is a positive relationship between the rate of drownings and a rise in ice cream sales. One could say that one causes the other, but actually, the outside factor causing both is the weather. Warmer weather in summer means that more people are likely to go swimming and more people are likely to buy ice creams.
3. **One variable causes the other: X causes Y or vice versa.** A genuine causal relationship exists. The problem remains about which is the cause and which is the effect? It is possible that causation goes in the opposite direction, that Y causes X. The direction of time is one obvious factor to consider. There is a strong explanation as to why pulling the trigger causes a bullet being fired, for example: the trigger causes the hammer to strike the primer that ignites the gunpowder and the ensuing explosion propels the bullet.

3.1 Methods for investigating potential causal relationships

To establish a genuine causal relationship like in the third case, several types of complementary evidence are required, ranging from simple to complex, common to rare.[38] These range from:

- Basic **correlational techniques** that show how one factor (income for example) is related to other factors, without controlling for outside confounding factors; to
- **Regression models** that do control for these factors to eliminate alternative causal explanations and assess the relative strength of relationships; to
- **Experimental studies,** like randomised controlled experiments and natural experiments, that observe changes over time following interventions to give more confidence on the direction and strength of causality than the other methods.[39]

In the social sciences, empirical tests of the causal mechanisms at the level of individual action are also necessary to understand the generative process linking the potential cause and effect. For example, lack of investment in children is commonly cited as a theory that may explain how poverty experienced in childhood causes poor outcomes later in life.[40] To test this, a study would need to be designed to analyse how individuals make investment decisions with respect to their children's development.

Correlational and regression techniques are the most common, while experimental studies are relatively scarce, particularly in New Zealand.[41] We will primarily draw upon the first two types of evidence as they constitute the majority of the existing literature.[42]

Different kinds of evidence also answer different questions, which can be categorised as:[43]

> Association: Cause and effect?
> Sequence: Cause to effect?
> Interventions: Effect from cause?
> Explanations: How is effect caused?

3.2 A worked example exploring correlation and regression

Is early motherhood a direct cause of poverty? Researchers have attempted to untangle the causal relationship between early motherhood and poverty using data from the longitudinal birth cohort Christchurch Health and Development Study.[44] Similar findings from regression models will be called upon in further sections, as will an analysis of how family changes trigger movements into and out of poverty, but for now this example is primarily here to help to illustrate what conclusions can be drawn from which data.

1. **Association**: Mothers who became parents before age twenty had significantly worse economic outcomes than women who weren't mothers at the same age.[45] These early mothers "worked fewer hours in paid employment; were more likely to be welfare dependent; had lower personal incomes; were more likely to experience economic hardship; were more likely to report that they did not have enough money for everyday needs; and were more likely to report that it was impossible for them to save."[46] These findings show there is a correlation between early motherhood and poverty.

   But having a higher likelihood of being in poverty was not the only characteristic shared by those who had become mothers in their teenage years. When compared with women who were the same age but did not experience early motherhood, the authors find that:[47]

   > early mothers were more likely to have been raised by a mother who was young, had no formal educational qualifications, and were a single parent, were more likely to be of Māori ethnicity, were more likely to have experienced sexual abuse before age 16, had lower IQ and academic achievement, had higher levels of childhood conduct problems and attention problems, were more likely to affiliate with deviant peers at age 14, and were more likely to have used alcohol by age 14.

   These shared characteristics of family background and early life circumstances are covariates—other possible causal explanations for the relationship between early motherhood and poverty.

2. **Sequence:** To eliminate these alternative causal explanations, researchers use regression models with information from people's lives over time to **control for these potentially confounding factors:** the "pre-pregnancy differences between early mothers and other women."[48]

There are two potential outcomes:

- If the relationship between early motherhood and economic outcomes **disappears** when these family background and early life circumstances are considered, then it's likely that these factors are driving the relationship, rather than early motherhood itself—that is, that these family background and early life circumstances are likely causing both the early motherhood and the poverty. In this way, early motherhood is likely an *indicator (or symptom/marker)* of poverty rather than a likely cause of it. Indicators can potentially mask the true underlying causal factors.

- If the relationship between early motherhood and economic outcomes **remains** after these family background and early life circumstances are considered, it suggests that early motherhood does increase the risk of poor outcomes, regardless of the woman's background and life circumstances before becoming a mother. We would be much more confident about the causal relationship between early motherhood and economic outcomes.

After controlling for potential confounds, **the relationship "between early motherhood and all of the economic outcomes," while diminished, *was still significant*.**[49] This suggests a potential causal relationship as many of the alternative explanations for the relationship were eliminated. Even after adjustment, early mothers were around "five times more likely to be

welfare dependent at age 30," around five times more likely to experience economic hardship, and earn $10,000 less per year than women who didn't have children early in life.[50] This "economic disadvantage … is still evident ten years after their entry into motherhood, suggesting long-term impacts rather than short-term setbacks.[51]

3. **Interventions:** The statistical regression model used here is not an intervention-type experiment and cannot definitively establish causation. Instead, regressions are best understood as a tool to help rule out alternative explanations to provide additional confidence about potential causal relationships.[52] We cannot, therefore, support a categorical claim that early motherhood causes poverty. A true experiment to draw more confident and robust causal conclusions would involve mothers being randomly assigned to have children then observing the effects. This has obvious ethical problems, and highlights the difficulty faced by social scientists in this area.

4. **Explanations:** The research used here has established an association but it cannot confirm the mechanism acting on this relationship. For this, a theory needs to be devised that links the potential cause and effect. In this case, the authors of the Christchurch study note "one possibility is that having a child before age 20 interferes with important life tasks that are being completed around this age, such as completing education or entering the job market. Failure to complete any of these tasks may limit an individual's later opportunities for economic success."[53] This is, for now, a theory, and would also require additional empirical research that observed the level of individual/family action to support it.

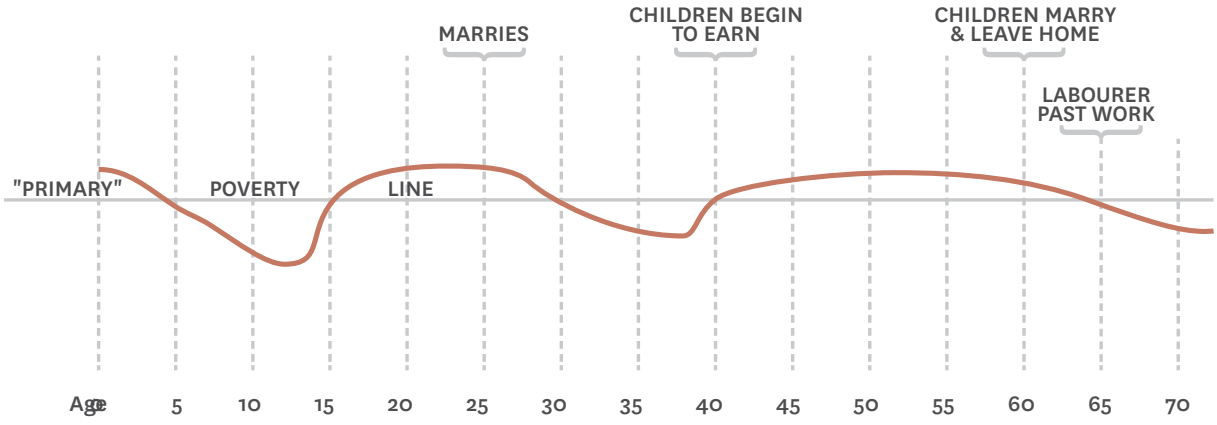
It is important to use the right set of tools for the job. This section has shown how different research methods can uncover different aspects of reality so we can—to the extent that it is possible—assess the nature, strength and direction of causal relationships. The limitations of the available research methods have also been made apparent. Nevertheless, seeking to uncover potential causal relationships gives us "levers on reality, some basis for choosing how to act," as political scientist W. Philips Shively writes, "coincidence without cause gives you no lever."[54] Making accurate distinctions between potential causes and mere indicators, for example, is crucial for targeting poverty-fighting policy well. We sometimes pull policy levers to no effect, and other times we simply pull the wrong levers entirely. A better understanding of the potential causal processes driving poverty will help guide better policy responses.

4. INCOME DYNAMICS

Now that we have covered the ways in which we can identify and test the strength of causal relationships, it is time to turn to ways in which we can track how resources and needs change over time, what researchers call income dynamics.

Our lives are constantly in flux. We experience predictable life-cycle changes like reaching adulthood, having children, and retiring one day, and, in an uncertain world, we also face unpredictable challenges like relationships falling apart or losing a job. Like ocean currents, broader economic and cultural forces also push and pull us about. It should therefore come as no surprise that our resources and needs fluctuate alongside these changes—predictable and unpredictable; favourable and unfavourable. An early illustration of income dynamics across the lifetime of an individual may be seen in Figure 3 below:

Figure 3: Seebohm Rowntree's "Five alternating periods of want and plenty for a labourer"



Source: Seebohm Rowntree, Poverty: A study of town life, (Macmillan, 1901) 137.

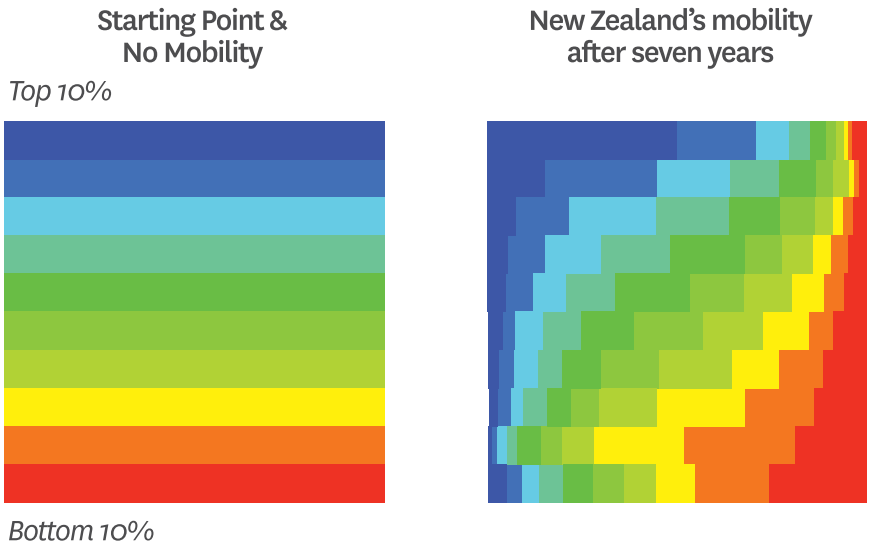
Individuals and families will often move up and down the income ladder, living on a relatively low income at one point, then moving to a higher income, and perhaps dipping back down. Needs change too as changes to family structure and size drive movements above and below the poverty line, as is mostly the case in Figure 3.[55] Such movement is referred to as **income mobility**. The length of time a family spends on any one rung on the income ladder is referred to as **persistence**—the stay can be temporary, recurrent, or persistent.

4.1 Mobility

Though it is individuals and families who experience income mobility, mobility is often thought about and discussed at an aggregate societal level. The images below in Figure 4 use data from a longitudinal survey called SoFIE to represent this **movement across the entire income distribution over time** in New Zealand between 2002 and 2009.[56] These images can be difficult to interpret, but an analogy borrowed from Stephen Jenkins, LSE Professor of Economics and Social Policy, may help.

Imagine a multi-storey apartment building with ten floors, the poorest living in the basement (red), the richest in the penthouse (blue) and the rest dispersed in the middle floors in order of income.[57] The left-hand side diagram shows this. While movement was tracked year-to-year, the right-hand side diagram shows movement among the levels after seven years.[58] It answers the questions: "how much movement between floors is there...is there much turnover in the basement, and do basement dwellers ever reach the penthouse? Who moves the most and how far?"[59]

Figure 4: Relative income mobility between 2002 and 2009



Source: New Zealand Treasury, "A descriptive analysis of income and deprivation in New Zealand," (2012), 2.

Analysing the information illustrated in Figure 4 we see that after seven years, over a third of people are still living on the floor they started.[60] Though there is a lot of movement, **most movement is a short distance**. From year to year, around 70 percent of New Zealanders stayed in the same level, or moved up or down one level. At the end of the period, 38 percent of New Zealanders on average (about 20 percent of families with children) were in the same level as when they started.[61] The general trend was to move up or down a floor—using the stairs is more likely than needing to use the elevator. This holds across all income levels, for the rich and the poor alike, although the poor are relatively less mobile. These trends in mobility and persistence are broadly consistent across comparable OECD countries and reasonably independent of economic cycles.[62]

Jenkins likens this dynamic to the elasticity of a rubber band:[63]

> Each person's income fluctuates about a relatively fixed longer-term average—this value is a tether on the income scale to which people are attached by a rubber band. They may move away from the tether from one year to the next, but not too far because of the band holding them. And they tend to rebound back towards and around the tether over a period of several years. In the short-term some of the observed movement may simply be measurement error and, in the long term, the position of each person's tether will move with secular [long-term] income growth or career developments. But, in addition, rubber bands will break if stretched too far by 'shocks,' leading to significant changes in relative income position.

Rather than a broader concern across the whole income distribution, in this paper we are concerned with the inhabitants of the bottom few floors of the income-dynamics apartment building—the people who aren't experiencing any lasting movement upward and are finding themselves tethered to those floors.[64] We are especially concerned with the inhabitants whose stay in the basement persists for many years.

4.2 Persistence

While we often have a pre-determined idea of what "the poor" are like, they are not a fixed group. A family struggling with low income that shows up in the headline statistics one year is not necessarily in the same financial position the next year. The evidence shows that people's incomes—all across the financial spectrum—shift significantly over time. The term poverty can be misleading, as "many more people are touched by poverty over time than are poor in any given year;" more than we might assume.[65]

Consider an illustration: a hospital ward with ten beds.[66] Imagine this ward is the bottom floor of the building in the above example. If we were to walk around the ward and ask how long patients had been there for, and the

majority responded that they'd been there for over a year, we could reasonably assume that the "average patient" was in the ward for over a year. The bed in the corner with someone staying for just a few days would seem like a minority. But if we repeated our walk around the ward every week for a year, we'd meet a new person each week in the bed in the corner. If, for example, nine patients out of ten were there for the whole year with a new person each week in the tenth bed, there would be fifty-two short-term stays and nine long-term. *The minority at a point-in-time* become *the majority over a period of time*.

The evidence shows that poverty works in a similar way.[67] While a snapshot of data at one point in time will show what proportion of people are in poverty, it says nothing about how long they've been there.[68] Poverty rates do not distinguish between those passing through, those dipping in and out, and those languishing there for many years. To account for these different types of poverty, longitudinal research shows that poverty can be classified into three categories: **transient, recurrent, or persistent.**[69]

4.2.1 Transisent poverty

Over time, most people who fall into poverty are there for a short spell—these are the transient poor. At any point in time, around a third of New Zealand households with low income are there temporarily.[70] This means that **more people are affected by poverty over a period of years than are poor for a single year.**[71]

In New Zealand, around a quarter of New Zealanders have a low income for any particular year, but over the course of seven years around half of the population—more than double those experiencing poverty at any one time—experienced poverty for at least one year.[72] This makes sense considering times when people are studying, between jobs, or recovering from being sick or having a child.[73]

4.2.2 Recurrent poverty

Most people who escape poverty do not fall back into poverty for a long time, but a "non-negligible fraction" do—these are the recurrent poor.[74] The data behind Jenkins' rubber band illustration explains this to some extent. Families just below the poverty line, for example, may rise up for a time but on average they will tend to "rebound" back towards were they started. This results in frequent transitions across the poverty "line." Given median income measures, it is also possible that these transitions are due to changes in the median income like those experienced during a recession.

While there is limited available data here, the composition of the recurrent poor in New Zealand is similar to that of the nation as a whole—no groups (age, ethnicity etc.) appear to be significantly over or under-represented.[75] UK evidence observed that around a third of "the 'pool' of people in poverty over a six-year period involved the same individuals revolving in and out of poverty."[76]

4.2.3 Persistent poverty

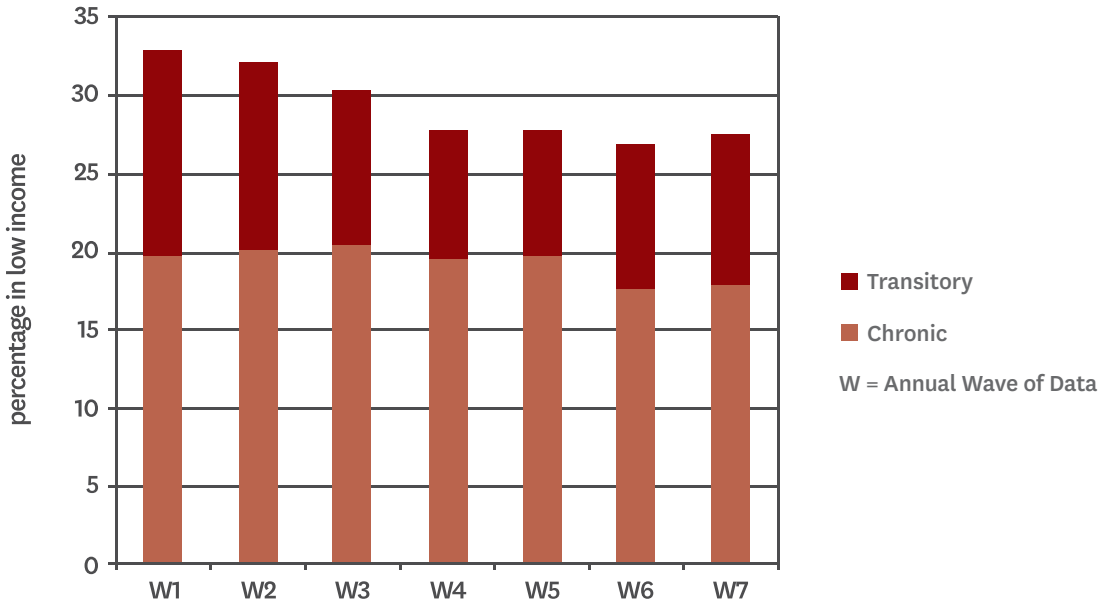
While, across society, most of those who started out on lower incomes will end up better off in real terms over their lifetimes, sadly, there are many who remain mired in poverty for longer spells—often referred to as persistent poverty.[77]

According to SoFIE data, 16 percent of New Zealanders experienced persistent poverty, defined as having a low income for at least five of the seven years surveyed. An alternative way of measuring persistent poverty that averages incomes over a number of years (to allow for savings/debt cycles) finds that around 70 percent of those experiencing point-in-time poverty have or will be there persistently; 80 percent of children and Māori experiencing point-in-time poverty have or will be there persistently.[78] Using this measure, around 11 percent of all New Zealanders, 18 percent of children and 19 percent of Māori experienced poverty persistently.[79]

While persistent poverty affects a relatively small share of the population, the effects on people's lives are significant. **The longer a family is in poverty, the more likely it is that they will experience greater levels of hardship and more severe poverty.** Those "that had low income for seven years on average were more than three times more likely to report being in hardship than those people who had low income in one year."[80]

Poverty now also drives poverty in the future. In what has been called the "state dependence" effect, **being poor one year raises the chances of being poor the next,** even when other factors have been controlled for using a multivariate model.[81] New Zealand data suggests that a family with low income one year is 65 percent likely to remain on low income the following year.[82] International

Figure 5: Proportion of households in transient and persistent low income



Source: New Zealand Treasury, "Improving outcomes for children –Initial Views on Medium-term Policy Directions, Report to the Ministerial Committee on Poverty," (2013), 9.

evidence suggests that families are four times more likely to enter poverty if they have been in poverty in the past.[83] Not only are families "who have experienced poverty in the past ... more risk of entering poverty than those who have not been in poverty," international evidence suggests that **the longer they stay there the less likely it is that they'll escape.**[84] This is why poverty is often described as a "trap."

4.3 Cumulative impact of poverty

The "cumulative impact" of persistent poverty can scar deeply, with effects shown even into the next generation, particularly when a family experiences persistent poverty when their children are young.[85] Children in persistently poor families suffer more and are more likely to be poor themselves in the future.[86] Around 12 percent of children were considered to live in persistent poverty (at least three years), while around 6 percent of children were persistently poor for the entire seven years of the 2012 SoFIE survey. Longitudinal research shows that family income measured over many years is a better predictor of a child's outcomes than using just one year of data.[87]

It is these long-term consequences of persistent poverty that lead us to concentrate the remainder of this paper on this group. In turning to this group now, we are interested in both **current poverty**—that is, what keeps poor families poor within lifetimes—and **future poverty**—that is, what makes poor children grow up to be poor adults across generations.[88]

5. CURRENT POVERTY: POVERTY WITHIN LIFETIMES

What causes poverty for families today differs from what causes poverty across generations. Accordingly, the following sections are organised into these temporal divides: within lifetimes and across generations. Different types of evidence are appropriate for different types of poverty. To begin the within lifetimes section, we start with risk factors and trigger events.

5.1 Risk factors and trigger events

Causes of poverty within lifetimes can be viewed through two lenses: risk factors and trigger events:[89]

- **Risk factors** are "the social characteristics or personal resources of an individual or household which mediate how resistant or vulnerable they are to poverty";
- **Trigger events** are "the event[s] which actually trigger an entry into [or an exit from] poverty."

Risk factors and trigger events are related, yet distinct. Employment as a concept, for example, can be either: the state of being unemployed is a risk factor, while the *occurrence* of losing a job is a trigger event. We will start with risk factors first and then transition to analysis of trigger events. We will also briefly discuss the positive role of protective factors and resilience.

5.2 Risk factors

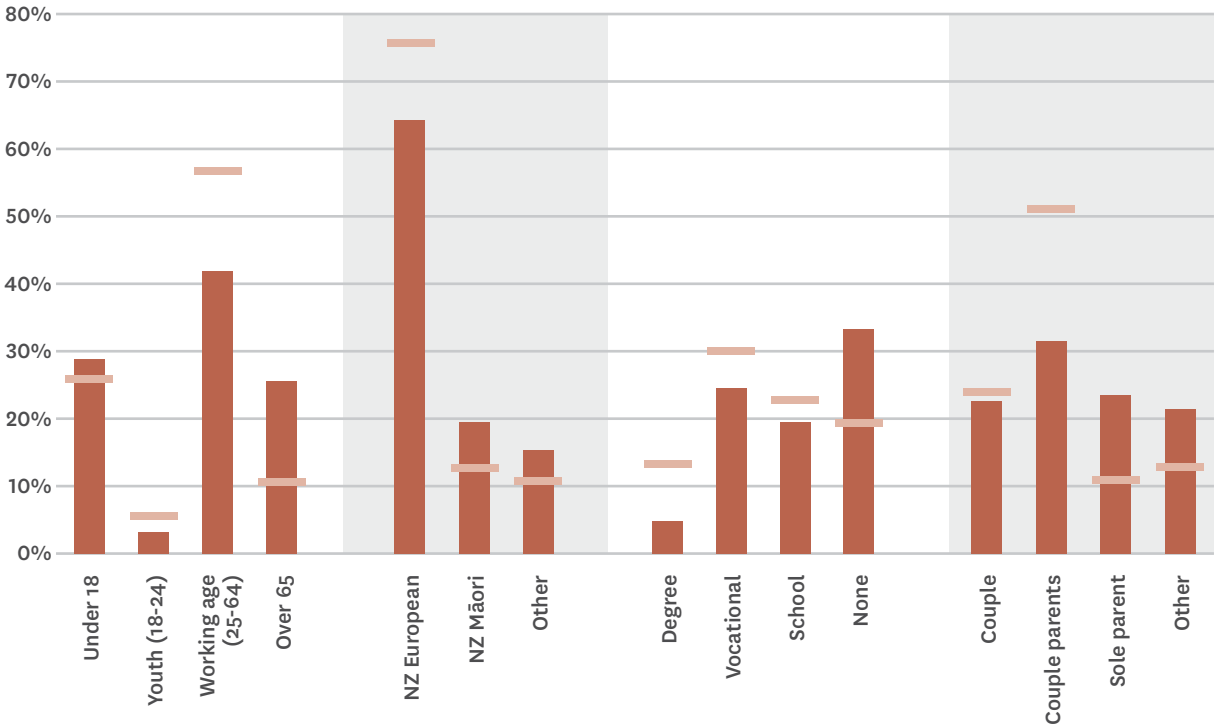
Poverty risk factors are the characteristics and personal resources highly correlated with low income. Research into their degree of correlation to low income can give us the likelihood that a family that exhibits these risk factors will end up poor.[90] Because correlation precedes causation, **identifying risk factors is a necessary first step towards painting a better causal picture.** Risk factors are not necessarily causal factors, however. As risk factors are about identifying correlations, they can only hint at the answers to deeper causal questions regarding why families fall into poverty—identifying trigger events or using regressions and experimental techniques are better suited for the next step in the process.

Risk factors are related to all types of poverty: transient, recurrent, and persistent. Those who find themselves in persistent poverty, however, experience more and worse outcomes that cluster together, creating a snowball effect.[91] In other words, the relationship between risk factors tends to be more exponential than linear. Researchers have found that "**a sliding scale of poverty persistence results from an accumulation and intensity of risk factors.**"[92] This is what Treasury (and much of the literature) calls multiple disadvantage or "linked and mutually reinforcing problems," where "the impact of low income on outcomes for children is greatest when the low income is persistent over a number of years and when it is combined with a range of other risk factors."[93] The impact is more pronounced for Māori, with a stronger correlation between persistent low income and increased deprivation.[94] Scholars call it a web of deprivation, consisting of a "dense network of psychological, social, historical, and economic factors that either created or perpetuated problems."[95]

5.3 Risk ratios and at-risk groups

One way to discern whether or not a factor is a risk factor for poverty is to calculate the risk ratio for different groups in society—particular ages, ethnicities, educational levels, and family structures. Figure 6 below illustrates the risk ratios for different groups in New Zealand society.[96] The green dashes in the figure show the proportion of the entire population with those characteristics (e.g. about 27 percent of the population is under 18), while the gold bars show the rate of persistent low income for each group (e.g. about 29 percent of those under 18 have persistently low incomes). If persistent poverty was evenly distributed across the population, then the green dashes would be the same height as the gold bars. Green dashes above the gold bar mean there is an under-representation—these characteristics have a low association with poverty. Green dashes below gold bars mean there is an over-representation—these characteristics have a higher association with poverty.

Figure 6: Characteristics of population with persistent low income



Source: New Zealand Treasury, "A descriptive analysis of income and deprivation in New Zealand," (2012), 11.

According to this data the following characteristics are potential risk factors for persistent poverty. Over-representation can be measured using risk ratios—the higher the figure the greater the risk (risk ratios in parentheses below):

- Being over 65: making up about 11 percent of the population, but 26 percent of those with persistently low incomes (2.4)‡
- Being a sole parent: making up 11 percent of the population, but nearly 24 percent of those with persistently low income (2.2)
- Being in a family structure other than a couple or sole parent: making up 12 percent of the population, but about 21 percent of those with persistently low income (1.75)
- Having no educational qualifications: making up about 19 percent of the population, but 33 percent of those with persistently low income (1.7)
- Being Māori: making up about 13 percent of the population, but 19 percent of those with persistently low incomes (1.5)
- Being from an ethnic group other than NZ European or Māori: (making up about 11 percent of the population, but 16 percent of those with persistently low income (1.5).
- Being under 18: making up about 27 percent of the population, but 29 percent of those with persistently low incomes (1.1)

We see similar data in Table 2 below, which outlines the risk ratios for child poverty of different groups in society. The table gives us the (point-in-time) poverty rate for each group, the percentage this group makes of poor children, the percentage of all children in this group, and the risk ratio. The risk ratios coloured red are of greatest concern.

‡ Those over 65 are, however, much less likely to suffer hardship. Treasury (2012) Descriptive Analysis, 3. This is likely due to the provision of New Zealand Superannuation, reduced needs from family, and the accumulation of financial assets such as a mortgage-free family home that act as a buffer protecting them from the hardship usually associated with persistent poverty – Perry (2010) The Material Wellbeing of Older New Zealanders: Background Paper for the Retirement Commissioner's 2010 Review, 2.

Table 2: Poverty rates, composition and risk ratio for children by household characteristics and ethnicity

Dependent children (0-17 yrs): 1,060,000	**Children in income-poor households**		**All children**	
	What % of this category are poor?	**What 1,060,000% of poor children are in this category?**	**What % of all children are in this category?**	
	Poverty rate (%)	Composition of the poor (%)	Approximate composition for all children (%)	Risk ratio (composition of poor / all children)
Household type				
Sole parent HH	64	47	18	2.6
Two parent HH	15	44	69	0.6
Multi-adult family HH	16	8	12	0.7
Family type				
Sole parent families	53	53	24	2.2
- in SP family on own	69	45	16	2.8
- within a wider HH	23	8	8	1
Two parent families	15	47	76	0.6
# of children in the household				
1 or 2	21	55	63	0.9
3+	29	45	37	1.2
Ethnicity				
Māori	34	34	24	1.4
Pacifika	34	13	10	1.3
Other	27	14	12	1.2
Euro/Pākehā	17	38	54	0.7
Highest household educational qualification				
No formal qualification	55	15	7	2.1
School qualification only	35	38	25	1.5
Post-school non-degree	21	33	38	0.9
Degree or post-graduate	12	14	30	0.5
Main source of income for HH				
Benefit	75	63	22	2.9
Market	12	37	78	0.5
Tenure				
HNZC	54	19	9	2.1
Private rental	38	53	33	1.6
Own home	12	28	59	0.5
Children overall	23	100	100	1

Source: Adapted from Bryan Perry, Household Incomes Report (MSD, 2015) 134. Poverty threshold based on the 60% of median CV (fixed line 2007) AHC measure: average over last three surveys, HES 2011 to HES 2013

According to this data the following characteristics are highly potent risk factors for persistent poverty among children:

- Living in a household in which the main source of income is a benefit
- Being part of a sole parent family, especially if that family lives on its own
- Living in a household in which no one holds a formal educational qualification
- Living in a Housing New Zealand house

In addition, this data shows that the following characteristics have a medium potential of being risk factors for persistent poverty among children:

- Living in a private rental
- Living in a household in which the highest educational qualification is a school qualification only
- Being Māori
- Being Pasifika
- Having an ethnic background other than Māori, Pasifika, or NZ European
- Living in a household with three or more children

Comparing the data from Figure 6 and Table 2, we begin to see some patterns emerging. In both datasets, we see that **those with no formal educational qualifications are at significant risk,** as are **sole parent households.**[97] Interestingly, Table 2 tells us that the risk ratio for sole parents drops significantly if those families are living within a wider household. As well, the two datasets agree that **being from an ethnic group other than NZ European** elevates your risk of experiencing persistent poverty. The characteristic with the highest risk ratio according to Table 2—**living in a household in which the main source of income is a benefit**—is not included as a category in Figure 6, but we can assume that if it had been, it would be another risk factor that the two datasets would share in common.

5.4 Protective factors and resilience

The datasets in Figure 6 and Table 2 show us not just what characteristics or factors are strongly correlated with poverty, but also those that seem either to stop people from falling into poverty or to shorten their stay in poverty, thereby minimising the potential harm poverty may cause. These are protective factors. If risk factors represent vulnerability, protective factors represent safeguards, which can be considered "positive risk."

Protective factors are, more often than not, the opposite side of risk factors. In Figure 6, those groups that are under-represented in poverty statistics are ones that exhibit protective factors. In Table 2, the factors with risk ratios under one could be considered protective factors. Therefore, according to the data in Figure 6 and Table 2, the following are protective (or "positive risk") factors:

- Being of working age
- Being NZ European
- Holding at least one formal educational qualification (degree, vocational or school) or being in a household where the highest education achieved was at least some education after school
- Being part of a couple or within a two-parent or multi-adult household
- Being a member of a family with 1 or 2 children
- Being in a household where the main source of income is from the market
- Living in your own home

Educational attainment appears high on this list. While the literature shows that holding a formal educational qualification is an important factor in protecting an individual and their family from poverty (because skills and qualifications afford better employment opportunities), it does not seem to play a significant role in increasing the chances of ending a spell of persistent poverty.[98] It would seem that when it comes to poverty, stability in the home by avoiding separations and remaining in work are key protective factors.[99] From a life course perspective, evidence suggests that protective factors "include individual characteristics, family cohesion and warmth, good parenting and external support systems."[100]

This conclusion may also be drawn from longitudinal data from the UK about types of households and the average number of years each type will experience poverty over eight years.

Table 3: Distribution of the number of years poor over an eight-year period

Type of households (UK)	Average number of years in poverty (over 8 years)
Couple Households	
Both working, no children	1.30
Both working, one child aged under 6	1.61
Both working, two children, one aged under 6	1.93
Head working but no others, no children	1.60
Head working but no others, two children, one aged under 6	2.83
No one working, no children	2.27
No one working, two children, one aged under 6	3.75
Sole Parent Households	
Not working, one child aged under 6	3.59
Not working, two children, one child aged under 6	4.16
Not working, two children, one child aged under 6, no A levels	4.75
Working, two children, one aged under 6	3.26

Source: Stephen P. Jenkins, John A. Rigg, and Francesco Devicienti, The dynamics of poverty in Britain, (Department of Work and Pensions, 2001).104.

As we see in Table 3 above, being in a relationship and having a job shortens the average length of a poverty spell. A double-income-one-young-child household is likely to spend just over one and a half years in poverty, compared with a similar sole-parent household, which will spend about three and a quarter years in poverty on average. Take out employment in each of those households, and the average years in poverty increases to almost four years for the couple household and to just over three and a half years for the single parent household.[101]

In addition to characteristics that have a strong correlation with avoiding poverty or having only short experiences of poverty, there are factors that allow some at-risk families who end up in difficult situations to be able to "achieve despite the odds."[102] This process, whereby families draw upon protective factors to adapt to experiences of stress or adversity with relatively good outcomes, is called **resilience**.[103] That is, some families are able to suffer the same multiple life shocks and disadvantages that all those with low income face, but somehow they are able to minimise or even avoid all together the usual resulting negative long-term educational, health, and social consequences.[104]

SuPERU recently undertook research that asked "why some low income families report their income to be adequate while others on similar incomes report their income to be inadequate."[105] They found that **paid employment; having well-developed financial planning skills and strategies; setting aside money for future bills; ownership of assets; exhibiting a sense of being better off than others; having a belief in one's own ability to manage;** and **gaining a job or partner** were associated with families responding that their income was adequate.[106] Elsewhere in the resilience literature, it has been found that having a protective, "stress-resistant" family often acts as a protection for children in otherwise high-poverty-and-deprivation-risk environments.[107]

5.5 Trigger events

The risk and protective factors outlined above detail some of the characteristics that are highly correlated with falling into poverty and staying there persistently, or with avoiding poverty and experiencing only a short stay, respectively. But these are not factors that cause poverty—for those families that exhibit these risk factors to experience persistent poverty or to find their way out again, there usually has to be something referred to as a "trigger event."

Thinking back to our discussion of income dynamics and mobility, we learned that most individuals' and families'

incomes will fluctuate about a consistent point on the income scale as if they were attached by a rubber band. Sometimes, however, as Stephen Jenkins points out, "rubber bands will break if stretched too far by 'shocks,' leading to significant changes in relative income position."[108] These "shocks"—the things pushing families into poverty and pulling them out—are **trigger events**.[109]

5.5.1 Work and family events

As we saw earlier, poverty is a dynamic relationship **between resources and needs**—both factors rise and fall over time. Changes in the work context primarily influence resources available to the family, and the family context primarily influences what the family needs. Trigger events are usually grouped into these two categories/contexts: **work** and **family** (sometimes described in the literature as labour market changes and demographic changes).[110] Both can happen simultaneously.[111] Examples of trigger events include:[112]

- **Work** (Resources)
  - Gain or loss of a job
  - Increase or decrease in income/benefit (holding workers constant)
- **Family** (Needs)
  - Birth of a child or change in number of household members
  - Marriage (or de facto relationship), re-partnering and separation

Trigger events can be favourable or unfavourable, pushing a family into or pulling a family out of poverty.[113] They can also happen at different rates across a society and can exert differing levels of strength in pushing or pulling a family into and out of poverty.

5.6 Poverty entries and exits

In one study, New Zealand researchers used data from the Linked Income Supplement (LIS – a primarily cross-sectional survey with longitudinal information) to shed more light on income dynamics in New Zealand.[114] Two years of data (from the late nineties) was linked together to study transitions into and out of poverty. One major limitation with this dataset is that it only looks at a single transition between years rather than a multi-year window like other studies, which means the extent of poverty recurrence and persistence cannot be analysed.[115]

The researchers from Ministry of Social Development (MSD) and Motu who conducted the survey found that just over two-thirds of New Zealand children moved income deciles over the year; one in ten fell into poverty (60 percent threshold) over that time, and over half of those experiencing poverty exited. Both entries and exits were at the high end compared with European countries like Britain and Germany—suggesting a system with relatively significant "churn." Their analysis emphasised the "importance of labour market shocks and responses for generating child exits from poverty compared with demographic events. Demographic events and marriage market events are less frequent and, in New Zealand, are more likely to generate the positive events of exit and the negative events of entry into child poverty."[116]

In the subsections below, we will look more specifically at the findings from this study to assess the relative importance of different trigger events. Two family types (couple and sole parents) were compared and contrasted because different family types have differing experiences of transitions into and out of poverty.[117] Sole parent families are also much more likely to be persistently poor than couple families so are of particular concern. Table 4 shows the **poverty rate** (the number of people below the poverty threshold as a percentage of the total number of households), the **exit rate** ("the number of people who left poverty between one year and the next as a percentage of the total number of poor households"), and the **entry rate** ("the number of people who entered poverty between one year and the next as a percentage of the number of people who were non-poor") for all children, for lone parent households, for couple households, and for all households[118]—this information provides a base for the information to be provided in the entry and exit subsections below.[§]

§ The poverty exit rate tends to be higher than the entry rate because it is calculated on a smaller number of people (fewer people are poor than are non-poor)."Kemp (2004), 11-12. See also Jenkins & Rigg (2001).

Table 4: Poverty entries and exits by household type in New Zealand

	Poverty rate (risk)	**Exit rate**	**Entry Rate**
All Children	23.2	38.6	11.1
Lone Parent Household	47.0	**25.2**	23.5
Couple Household	17.7	**46.3**	8.2
All households[119]	20 (in 2002)	**8.3**	**7.3**

Source: Adapted Suzie Ballantyne et al., "Triggering movements into and out of child poverty: A comparative study of New Zealand, Britain and West Germany," Social Policy Journal of New Zealand (2004), 85. SoFie (for all households) data cited in Kristie Carter and Fiona Imlach Gunasekara, *Dynamics of Income and Deprivation in New Zealand, 2002-2009: A Descriptive analysis of the Survey of Family, Income and Employment (SoFIE)* (University of Otago, 2012), 18.

5.6.1 Trigger events: entries

Table 5, below, presents the relative importance of different trigger events, the probability of the event happening, and the proportion of those entering poverty following the particular events (all figures are for couple households). Think of the events as "doorways" into poverty. For comparison, the chance of any couple household entering poverty in one year is 8.2 percent. The percentages do not add up to 100 because transitions into poverty can happen when none of the identified trigger events occur and the events themselves are not mutually exclusive.[120]

To help interpret the table, consider the entry event "joined a lone parent household"—a parental separation in other words. A small proportion of New Zealanders (1.8 percent) separate annually, although this figure is likely an underestimation due to data limitations.[121] Approximately half of the families that experience this event (43.7 percent) will end up in poverty, accounting for around one in ten (9.6 percent) poverty entries. Given the average poverty entry rate for children in non-poor couple families is 8.2 percent annually, this means children in families who separate are over five times more likely to end up poor than those children in families that don't separate.

Table 5: Poverty entries by couple households in New Zealand

Entry trigger events: Couple Households[122]	**Relative importance** (Share of poverty entries (%))	**Probability of event happening**	**Probability of being poor after event** (Baseline entry rate for couple households 8.2%)
Household size rose	9.6	9.5	8.2
Joined a lone parent household	9.6	1.8	43.7
Lost one or more worker	36.3	13.9	21.4
Both of the above	9.5	1.6	49.4
Lost one or more full-time worker	26.1	10.4	20.5
Labour earning fell by 20% or more	20.2	18.7	8.8
Newborn child	8.7	7.5	9.5

Source: Adapted from Ballantyne et al., "Triggering movements into and out of child poverty," 91, 95.

Table 5 also tells us:

- The trigger event most likely to hit a couple household is a fall of 20 percent or more in labour earnings, but this event does not increase a family's risk of falling into poverty by that much, though it does trigger about a fifth of poverty entries
- Losing one or more worker at the same time as joining a lone parent household—so losing a "breadwinning" parent—presents the highest risk to a couple household of falling into poverty, but such an event only hits a small proportion of New Zealanders and is responsible for less than ten percent of poverty entries
- About ten percent of couple households will lose a full-time worker, and this will greatly increase their risk of falling into poverty; around a quarter of poverty entries will be triggered by losing a full-time worker

In summation, what this information suggests is that while losing a worker is a much more frequent experience than a marriage break-up, marriage break-ups are a stronger trigger for poverty entry than losing a worker. Losing a full-time worker and becoming a sole-parent family is even more likely to end in poverty.

5.6.2 Trigger events: exits

Tables 6 and 7, below, present the relative importance of different trigger events, the probability of the event happening, and the proportion of those exiting poverty following the particular events. As in Table 5 above, these events can be thought of as "doorways," but this time out of, instead of into, poverty. Again, the percentages do not add up to 100 because transitions out of poverty can happen when none of the identified trigger events occur and some events are not mutually exclusive.[123]

For both couple and sole parent families, gaining a full-time worker is by far the most common and effective pathway out of poverty. In New Zealand, sole parents find it much more difficult to translate both family and labour market changes into exits from poverty. While this trend exists internationally, it is particularly pronounced in New Zealand.

Table 6: Poverty exits by children in couple households in New Zealand

Exit trigger events: Couple Households	**Relative importance** (Share of poverty exits (%))	**Probability of event happening**	**Probability of not being poor after event** (baseline exit rate 46.3%)
Household size fell	14.4	8.1	81.8
Gained one or more worker	41.0	29.0	65.3
Gained one or more full-time worker	36.1	20.7	80.7
Labour earnings increased by 20% or more	26.6	17.4	70.8

Source: Adapted from Ballantyne et al., "Triggering movements into and out of child poverty," 89, 94

Table 7: Poverty exits by children in sole parent households in New Zealand

Exit trigger events: Sole Parent Households	**Relative importance** (Share of poverty exits (%))	**Probability of event happening**	**Probability of not being poor after event** (baseline exit rate 25.2%)
Household size fell	9.1	12.4	19.4
Left sole parent household	11.8	10.3	28.6
Gained one or more full-time worker	25.7	10.5	61.6
Both of the above	11.8	5.7	51.8
Labour earnings increased by 20% or more	6.6	6.3	26.3

Source: Adapted from Ballantyne et al., "Triggering movements into and out of child poverty," 87, 93

According to this data and international research, a sole parent gaining a full-time job is the most effective pathway out of poverty. It is around twice as effective as re-partnering by itself.[124] Large income rises are not very effective for sole parents. This "demonstrates that the labour market decision to work or not to work are [sic] more important for sole parents than changes in hours worked for those already working."[125]

5.6.3 Trigger events: summary

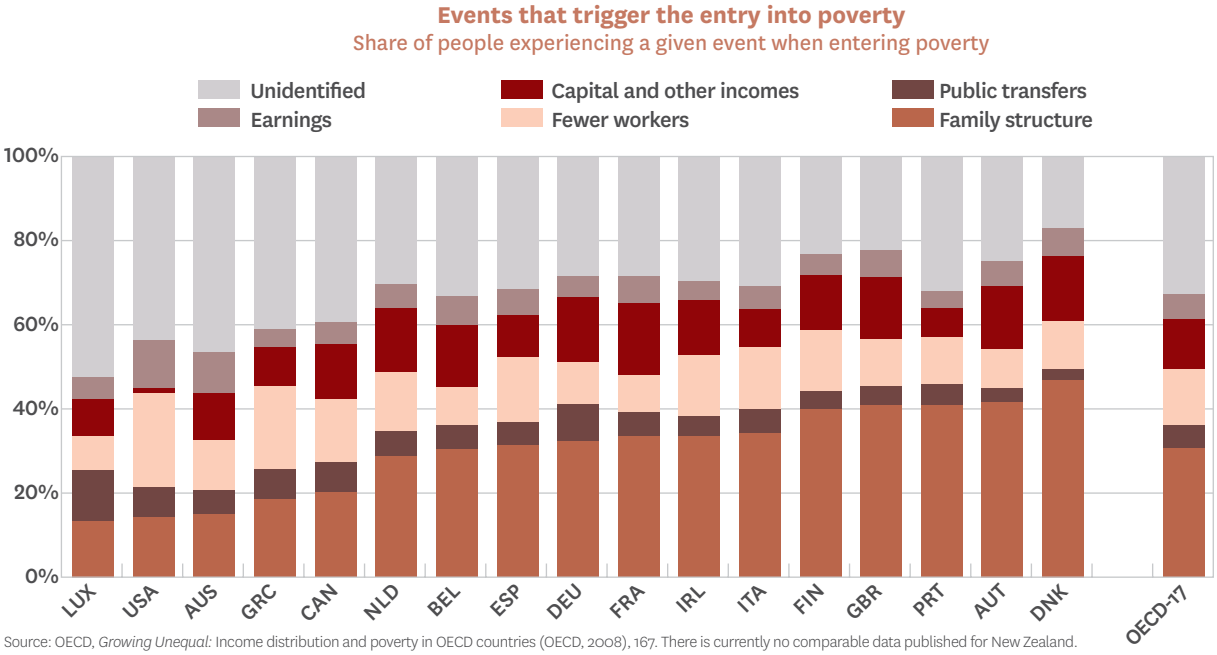
In summary, **trigger events that involve changes in work and income (primarily work and hours) are much *more likely* than changes in family circumstances to trigger poverty transitions**, both entries and exits.[126] International research suggests this finding holds across most countries studied, and reflects the fact that labour market events occur more often than demographic ones.[127] Research using Canadian data found that while family changes are more strongly associated with child poverty transitions, labour market events are *much more frequent*.[128] Here in New Zealand, as well as abroad, research, such as that discussed above, has found that work changes account for around four out of five poverty exits.[129] A factor that is often overlooked but has the potential to play a significant role is changes in income for household members other than the primary "breadwinner" in the family, which account for a large number of exits according to the UK data.[130]

Family changes, however, are relatively more likely to push families into poverty rather than pulling families out. For example, in Britain, changes in family circumstances account for at least one in five exits from poverty, and a greater proportion of entries—around two in five.[131] Conversely, changes in work account for three out of five poverty entries, and four out of five exits. As Noel Smith & Sue Middleton, researchers at the Centre for Research in Social Policy in the UK put it, "increased household need is more likely to trigger entry into poverty than decreased household need to trigger exit from poverty."[132] The majority of family changes involve a "new entrant" into the family—new children or partners. Figure 7 below shows the breakdown for a subset of OECD countries.

Stephen Jenkins, reflecting on his extensive work in income dynamics and trigger events, concludes that:[133]

> To some extent, these results are a straightforward consequence of using equivalised household income as a measure of an individual's living standards. But they are also an important reminder that individuals' experiences of income mobility and poverty dynamics depend on their household context and changes in it—not only the changing combination of income sources from all the individuals in the household but also changes in household composition itself.

Figure 7: International comparison of events that trigger entry into poverty



Source: OECD, *Growing Unequal:* Income distribution and poverty in OECD countries (OECD, 2008), 167. There is currently no comparable data published for New Zealand.

5.7 Life shocks and clustering

A similar yet related approach to trigger events involves investigating life shocks. In 2004, MSD studied the correlations between adverse life events and peoples' living standards (not income in this case). Examples of life shocks include:[134]

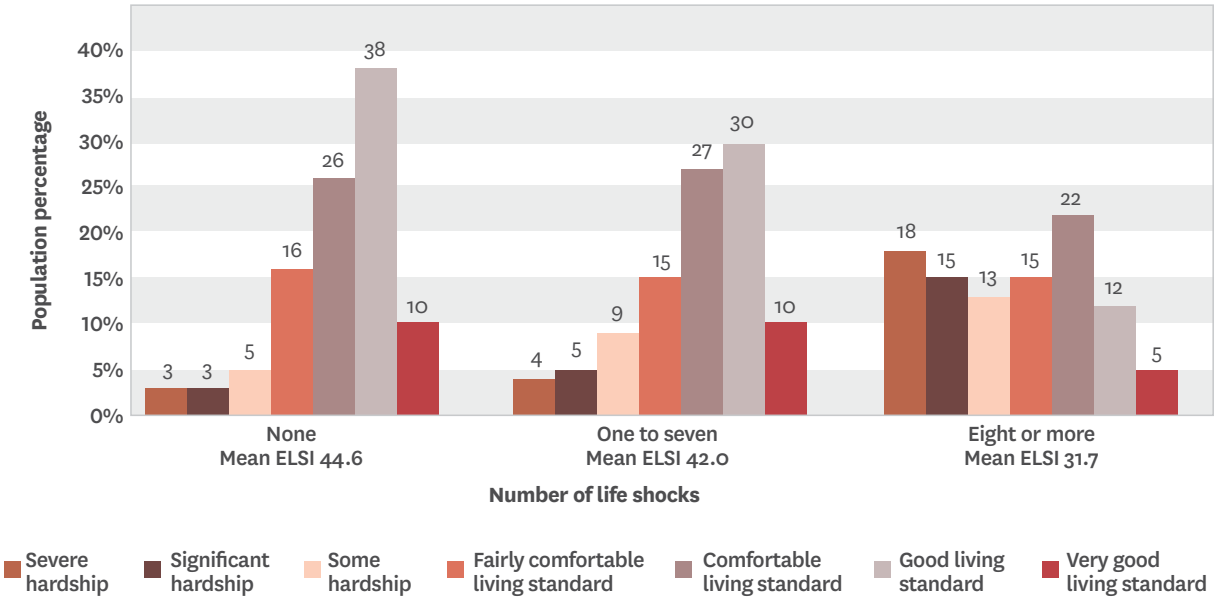
- Marriage break-up
- A mortgagee sale of home
- An unexpected and substantial drop in income
- Eviction from home/flat
- Bankruptcy
- A substantial financial loss
- Being made redundant
- Becoming a sole parent
- Three months or more of being unemployed (when actively seeking employment)
- Major damage to home
- House burgled
- Victim of violence
- Imprisonment
- Receiving a non-custodial sentence
- An illness lasting three months or more
- A major injury or health problem that required substantial hospital or specialist treatment
- An unplanned pregnancy and birth of a child

The researchers found that not only is the total number of adversities faced more predictive of negative outcomes than individual factors, the findings (summarised below) also reveal a "threshold effect":[135]

> Lower living standards tend to be associated with life shocks generally, but particularly when a person has had a large number of life shocks (eight or more). While many types of life shocks do not appear to have a significant impact when they occur in isolation, multiple shocks can combine to produce a large effect and substantially lower living standards when the overall burden of adversity reaches a certain level – the threshold effect.

This threshold effect, illustrated in Figure 8 below, is important to understand. Like the "multiple disadvantage" associated with longer spells in poverty, the cumulative and snowballing nature of life shocks underscores how problems beget more problems, tending to become too numerous and intertwined for families to overcome.

Figure 8: Living Standards of population aged 18 years and over by number of life shocks (2004)



Source: John Jensen et al, *New Zealand Living Standards 2004 – An Overview* (MSD, 2006), 22.

Risk factors not only tend to cluster, they also cluster in particular ways. Harnessing cross-agency "integrated" data, recent work by Treasury highlighted how statistical clustering techniques can be used to identify particular groups of at-risk populations.[136] Similar work has been undertaken in the UK that identified sub-groups of those on low income, with the goal of seeking to "prompt more holistic and multi-agency solutions (based on an understanding of multiple factors) regarding how each group might be helped out of the distinct type of poverty they face."[137] Innovative work like this will form the knowledge foundation for policy that is better tailored to the complex situations families are facing.

5.8 Limitations

What wasn't found by the research on trigger events is almost as important as what was—much remains unexplained.[138] Even work by leading international scholars with more comprehensive datasets **only identified and explained around half of the entry events.**[139] Associations between events and poverty transitions can be identified, however, they "provide a potentially incomplete explanation of the underlying causes of poverty transitions."[140] Questions around direction of causation complicate matters: the stress caused by a spell of poverty could cause a marriage to break up, rather than the other way around, for example.[141] Additionally, factors such as health (physical and mental) events weren't considered in the New Zealand research, where international research suggests that around 16 percent of poverty entries were associated with someone in the household with a mental health problem; eight percent for physical health.[142] The findings are only as good as the available data. Qualitative research could bolster and provide more texture to these findings, potentially highlighting and exploring some of the unexplained variations and difficult-to-measure issues like choice, hopes, aspirations, and expectations.[143]

6. POVERTY-RELATED FACTORS FOR FAMILIES NOW – INTERNATIONAL EVIDENCE[144]

As New Zealand-based evidence is limited, we now turn to the UK to round out and complement the domestic findings. The UK Department of Work and Pensions (DWP) summarised the extensive international literature, referencing over 300 academic and institutional sources on poverty now and in the future. Based on analysis of risk factors and trigger events, their findings on "factors making it harder to exit poverty now" are included below and evaluated using three criteria:[145]

- Certainty: Does it have an effect? How clear is the causal relationship?
- Strength: How large is the effect? How strong and direct is the impact?
- Coverage: How many are affected? How widespread is the impact?

Table 8: Relative influence of factors on length of poverty spell within lifetimes

Factor	Certainty	Strength	Coverage
Long-term Worklessness & Low Earnings	High	High	High
Parental Qualifications	High	High	High
Family Instability	High	Medium	Medium
Family Size	High	Medium	Medium
Parental Ill Health and Disability	Medium	Medium	Medium
Drug & Alcohol Dependency	High	High	Low
Child Ill Health	Medium	Low	Low
Housing	Low	Low	Medium
Debt	Low	Low	Medium
Neighbourhood	Low	Low	Medium
Educational Achievement	N/A	N/A	N/A
Non-Cognitive Development	N/A	N/A	N/A
Home Learning Environment	N/A	N/A	N/A

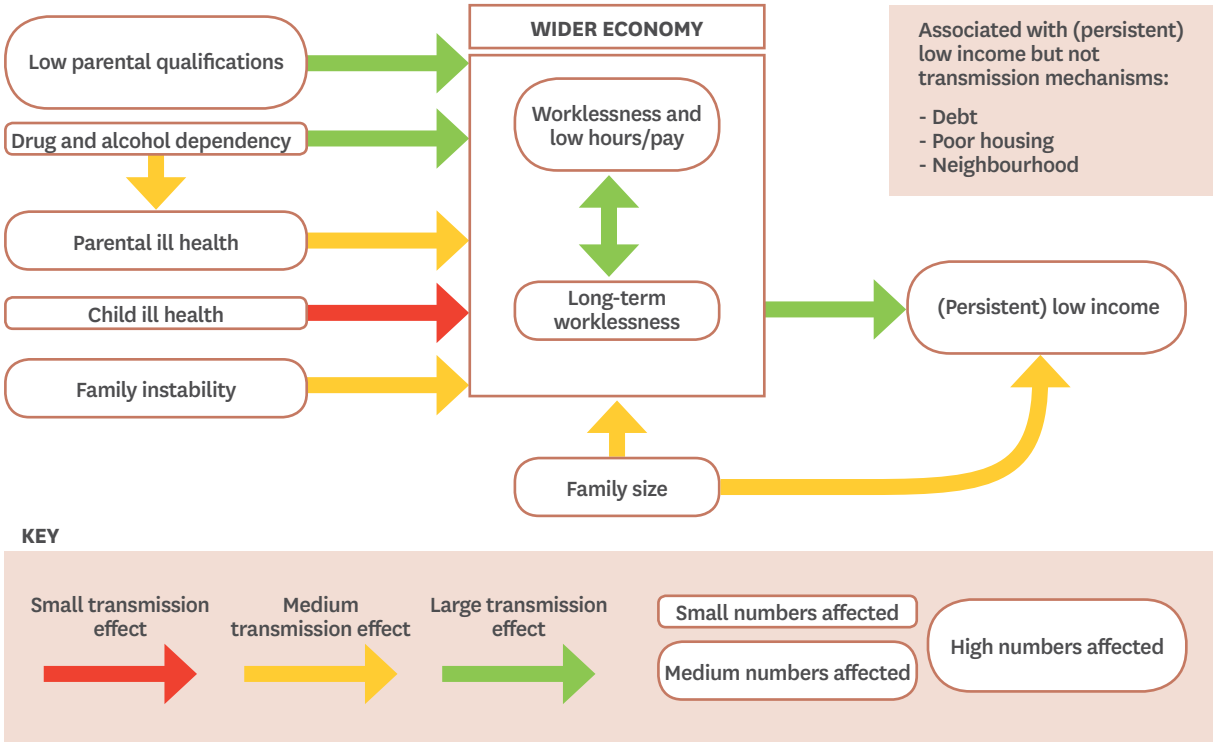
Source: Department of Work and Pensions, An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults, (HM Government, 2014), 6.

According to this evidence, **Long-term worklessness and low earnings are the primary causes of persistent poverty for families now.** Here, low earnings primarily refers to fewer hours worked through part-time or temporary work rather than low wages per se.[146] The causal link is clear and well-established: a family lacking work or on low earnings for an extended period leads to long spells of low income which is, in turn, associated with "multiple disadvantage." Parental qualifications directly impact opportunities for work and potential for earnings, warranting their high influence across the criteria. Analysis of income dynamics using longitudinal panel data—trigger events in particular—sheds light on this question from a within-lifetimes perspective. Risk factors add texture to these findings.

6.1 Potential poverty-related causal pathways for families now

Figure 9 shows the potential causal pathways outlined in Table 8 above in more detail: low parental qualifications, drug and alcohol dependency, parental and child health problems, and family size and instability flow, to a greater or lesser extent, through to the parents' ability to attain and keep a well-paid, stable job to provide for their family. The relative strength and coverage criteria are represented by the size of the arrows and dialogue boxes.

Figure 9: Potential causal pathways including size of group affected and transmission strength for factors making it harder to exit poverty now



Source: Department of Work and Pensions, An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults, (HM Government, 2014), 7.

We see that the majority of the factors do not *directly* influence income; the factors on the left hand side of the figure are intermediate or indirect pathways and act through the wider economy.‖ An intermediate pathway is like a link in the causal chain. Low parental education qualifications limit the number and quality of job opportunities. Family breakdown leads to fewer workers in the household and more sole parent families. Larger families have greater needs, and therefore, require more resources, and caring responsibilities may limit parents' potential to work. Parental disability and ill health both limit opportunities to work and increase families' needs. Drug and alcohol dependency significantly impacts a parent's ability to gain and maintain work, although this affects a small number of families. The available evidence suggests that debt, poor housing, and neighbourhood factors are more likely to be indicators than causes of poverty.[147]

6.2 Summary of current poverty: within lifetimes

A synthesis of New Zealand and international evidence suggests that workless families are at great risk. While only around one in five of all New Zealand children live in workless families, around three-quarters of these children are poor. Children living in these families also constitute the majority of all children in poverty at 63 percent. In contrast, only 12 percent of children living in working families are poor. But just because children from working families are at lower risk doesn't mean these families aren't of concern. Because working families make up the vast majority of all households, an alarming 37 percent of children live in "working poor" households. This is why it is not just unemployment that is problematic, but low earnings or unreliable hours too.

‖ Family size is the exception here, as it directly increases the needs of the household and subsequently the income required to meet those needs.

Stability is important in both work and family domains. Long spells of unemployment are of particular concern because they increase barriers that block entry or re-entry to work. Barriers include "skills loss, employer bias, and changes in individual attitudes to work."[148] Returning to work after a long break can also lead to employment in low-skill, low-wage jobs, which potentially contribute to instability of earnings and lead to a recurrent poverty cycle.[149] Research from the UK finds that even temporary employment can make a positive difference—a couple household where one parent is employed from time to time is "around five times less likely to experience persistent poverty than a poor family where both parents are persistently out of work."[150] Alongside stable employment, stable relationships help combat persistent poverty. Children continuously in sole parent households over a five-year period were just over twice as likely to not fall into poverty than children in families that moved into and out of sole parenthood during the same time period.[151]

Gaining a full-time worker is the surest route out of poverty, and holding a job is the best protection from poverty. Events that involve changes in work and income are much more likely than changes in family circumstances to trigger poverty transitions. While not as widespread, parental separation is much more likely than work events to be an entry to poverty, with around half of the children of recently-separated parents entering poverty. Sole parent families are over twice as likely as couple families to fall into poverty. Children of parents who have separated experience heightened short-term distress and likely longer-term negative impacts.[152] Some evidence that controls for income suggests that it is family functioning—mental health problems, parental conflict and poor parenting for example—rather than family structure itself that are the main factors.[153] This heightened risk is largely a function of fewer workers in the household and increased caring responsibilities. There is also evidence that a separation often leads sole parents to leave work if they were already working at the time.[154]

Benefit receipt follows similar mobility and persistence patterns to income. Over half of those on Jobseeker Support have been receiving the benefit for one or more years. Close to four out of five sole parents are in the same situation.[155] Benefit receipt is, for obvious reasons, strongly associated with worklessness. While some research shows benefit receipt is associated with a range of poor outcomes and the association persists even after controlling for income, it is likely that the same things that cause people to be on a benefit in the first place also cause the poor outcomes.[156]

Armed with these findings around the factors that push families into poverty now and keep them there, we will now turn our focus to the factors that cause intergenerational poverty, or poverty in the future. Today's children will form the families of the future. If worklessness in families now is the major causal pathway for persistent poverty, it follows that whichever family background factors and early life circumstances that influence children's chances at a well-paid and stable job in the future will also influence whether they will be protected from or fall into poverty when they grow up. The pathways and factors will be related, yet different, and we turn to them now.

7. MOBILITY AND PERSISTENCE: POVERTY ACROSS GENERATIONS

Poverty is an intergenerational, relational problem. While the prevailing philosophical perspective promotes the view of "individuals as choice makers and agents of their own lives," in reality our choices are inescapably influenced and bound by the "interlocking nature of human lives and generations."[157] We all live what sociologist Glen Elder Jr. calls "linked lives," where our life trajectories and transitions are shaped and bound by relationships with others—often most strongly by those closest to us, our families.[158] If we care not only about better outcomes for families now, but also families in the future, **it is critical to explore the links across generations** and to understand the extent to which parental circumstances and behaviours determine the life chances and outcomes of our most vulnerable people.[159] This deeper understanding can guide poverty-alleviating policy for our children and the generations to come.

This section will primarily investigate the link between low family income during childhood and future income/outcomes, seeking to understand: how, and to what extent, poverty is transmitted from one generation to the next, which mechanisms mediate this relationship and whether income is primarily an indicator or a cause of intergenerational poverty. We will show that income has a small to modest independent effect on a child's later outcomes—both economic and social—once we take family background and early life circumstances into account. Educational achievement will arise as a key transmission mechanism and will also be a focus.

"Children largely 'inherit' their parent's socio-economic status," writes Anna Cristina D'Addio of the OECD, summarising the literature. We saw earlier how a family in poverty one year is more likely to be poor the following year. Without some sort of intervention, poverty not only persists from year to year, but, as we'll see, from generation to generation. Income isn't the only inheritance that parents leave their children either: occupations, wealth, benefit receipt, personality traits, and beliefs all tend to persist across generations to varying degrees.[160] D'Addio finds that this transmission process operates through:

> ...a broad range of ***resources*** inherited from the parents either directly through ***genes*** (as in the case of health or ability) and ***wealth*** (assets or estates), or indirectly – for example when children learn ***behaviours and attitudes.*** These resources interact with the ***cognitive and non-cognitive abilities*** of children in ways that can work together to strongly influence their future life chances and to strengthen the transmission of inequality. [161]

Like economic resources, social and cultural resources can accumulate and offer a return in the form of educational and employment success, referred to by economists as human capital. Sociologists tend to refer to this process as the accumulation of social and cultural capital.[162] Social capital involves building and harnessing group membership, networks, and "contacts" for support and influence, while cultural capital denotes knowledge, attitudes, skills, and credentials that provide advantages and higher status in society.[163] Economic, social, and cultural capital are mutually reinforcing, and offer one explanation for how inequality is transmitted and inherited across generations.

7.1 Intergenerational mobility

One lens to view this inheritance through is **intergenerational income mobility**, a concept like income mobility above, but rather than tracking a family's income over time, it tracks how parental income influences children's income when they grow up.[164] Intergenerational mobility (and its inverse, intergenerational persistence) is of interest because it is considered to be a rough and ready proxy for equality of opportunity, as lower mobility (or higher persistence) indicates that fewer people have been willing and/or able to take chances available to them to advance socially and economically.[165] Low mobility also signals a waste of "human capital," where children from disadvantaged backgrounds are prevented from using their full range of skills and talents to productively contribute to society and the economy.[166]

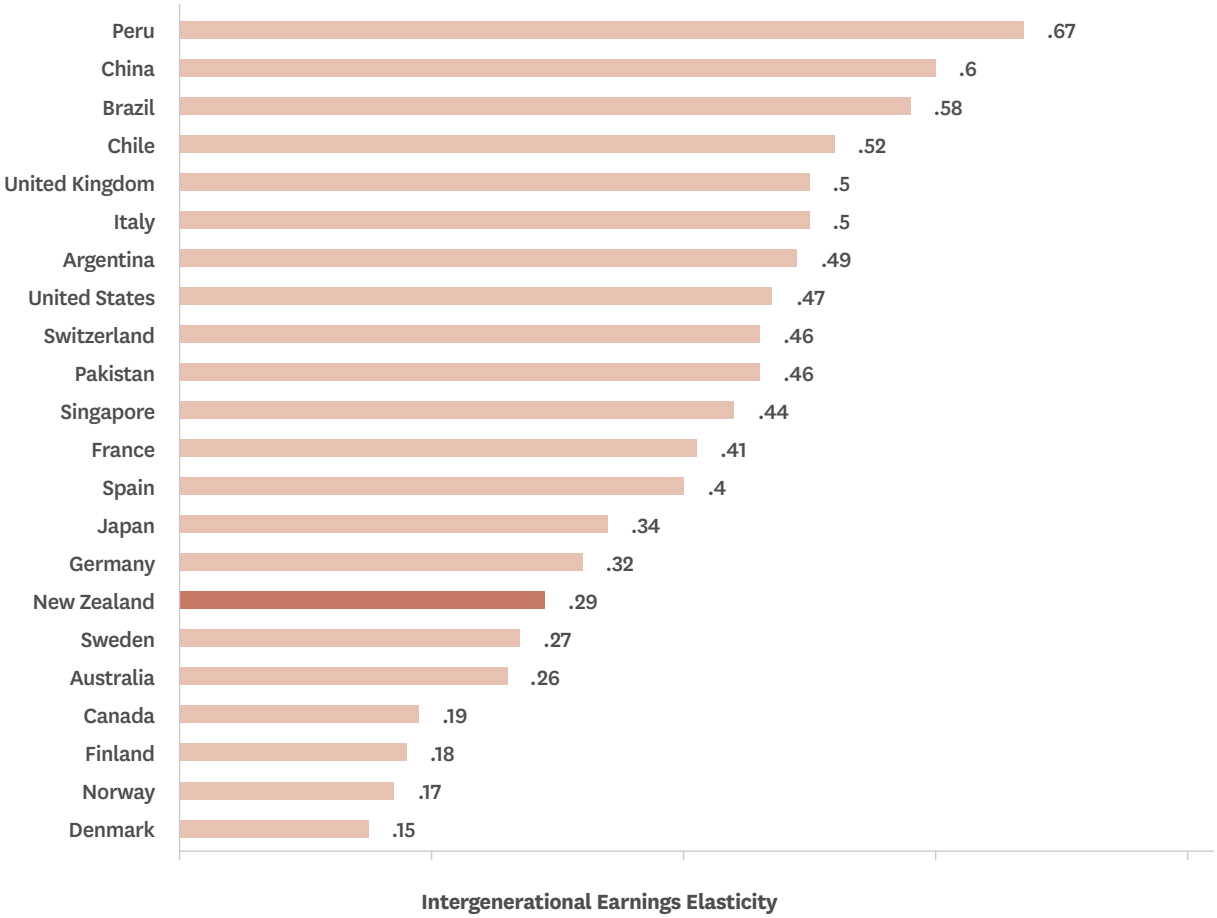
There is a legitimate, normative debate to be had regarding the "optimal" level of *overall* intergenerational income mobility—a society's values will ultimately determine where the balance lies.[167] Besides the fact that it would be impossible to implement policy-wise—as many of the drivers lie in the family context—there are other pitfalls involved with striving for "pure" equality of opportunity. These include leaving behind those who fail

to grasp the increased range of opportunities for reasons outside of their control and the requirement to unduly restrict parents from investing in their children's lives—a significant source of inequality.[168]

It is much easier, however, to agree that **low mobility at the bottom of the income distribution is a serious concern—this is intergenerational poverty.** Low mobility for families on low incomes signals an increased likelihood that poverty, and the cluster of harmful outcomes that likely go with it, will be inherited by the next generation. We, therefore, have a particular interest in the mobility and persistence of families with children on lower incomes. To return to the apartment illustration from earlier, our primary concern is the future outcomes of children raised in families in the basement. Ultimately, our goal is an "empty basement."

Using a thought experiment, economist Gary Solon showed how intergenerational mobility works by contrasting two imaginary societies—one with "complete" mobility and the other with none.[169] In the first society parents' economic background bears no influence on how rich or poor their children will be when they grow up, while in the second, it completely determines their children's future economic outcomes. In real life, most countries fall between these two extremes. Figure 10 below shows international comparisons of intergenerational mobility, where 0 is complete mobility and 1 denotes no mobility. In this instance, the lower the figure the lesser extent a parent's earnings will influence their children's economic circumstances when they grow up, representing greater mobility.[170]

Figure 10: International Comparison of Intergenerational Earnings Elasticity



Source: Miles Corak, "Income inequality, equality of opportunity, and intergenerational mobility," *The Journal of Economic Perspectives* 27, no. 3 (2013): 79-102..

7.1.1 International intergenerational mobility comparisons

When it comes to relative levels of intergenerational income mobility, New Zealand is in the middle of the road when compared internationally. The intergenerational earnings elasticity (IGE) of 0.29 Figure in figure 10 signifies that in **New Zealand**, all else being equal, the children of parents earning twice as much as another family would, on average, earn somewhere around a quarter to one-third more than the poorer family's children when they reached their early thirties.[171] This result is around the OECD average; the Scandinavian countries have higher mobility and the US, Italy and the UK have lower mobility.[172] The level of intergenerational mobility for Māori was also found to be similar to that of New Zealand overall, although it is worth noting that this mobility is from a lower baseline than that of most New Zealanders.[173] The OECD predicts a decline in New Zealand's future intergenerational mobility unless countervailing measures are introduced.[174]

Averages across society can mask important trends across different groups within society, however. International evidence that looks at differences across the income distribution (from the poorest to the richest) is mixed, but broadly points towards there being lower mobility (and higher persistence) at both ends of the income distribution in most OECD countries.[175] This means that **poverty in one generation increases the likelihood that the next will be poor as well—poverty is likely to persist across generations.**[176] In other words, children living in the basement and those in the penthouse are both more likely to live where their parents did when they grow up than those in the middle floors.[177]

7.1.2 Intergenerational poverty and poor outcomes

Intergenerational poverty is linked with a range of poor outcomes. As the report by DWP notes: "parental income has one of the strongest associations with children's future income and children's intermediate outcomes, with poor children disadvantaged across a spectrum of outcomes and from an early age."[178] As mentioned above, this association is well-established. The Children's Commissioner's Expert Advisory Group went so far to say that "incontrovertible evidence now exists showing that child poverty has long-lasting negative effects across multiple life domains."[179]

This leads us to a more interesting and fundamental question that goes beyond this well-established correlation between family income experienced in childhood and that child's future income as an adult that the intergenerational mobility figures show. **Does poverty in one generation *cause* poverty in the next in any meaningful way, or is it more an *indicator* or symptom?** Does it cause other poor outcomes? If it does, how strong are the relative effects?[180] We will now turn to evidence that controls for these potentially confounding factors like parental education, ethnicity, or drug and alcohol problems, to name a few.

7.2 Causal relationships across generations

Identifying whether poor outcomes later in life are the result of poverty in childhood or, alternatively, of individual, family and social factors is a critical question for policies aimed at reducing long-term disadvantage. If family income during childhood does play a direct causal role, then policies that boost income will likely be effective at reducing intergenerational poverty. However, if other individual, family, or social factors significantly mediate this relationship between childhood poverty and poor adult outcomes, then income-boosting policies may be ineffective in the long run.[181] But teasing out cause and effect across generations is more difficult than within lifetimes. This is because intergenerational timeframes stretch over several decades and involve a large number of variables and events, compared with trigger events like losing a job or worker in the family where cause and effect can be observed much more easily.

As we saw earlier (in the discussion of early motherhood), when an outcome like poverty is the result of a combination of factors, regression models are the usual tool for identifying which factors have an independent effect on outcomes later in life by helping to rule out alternative explanations for the observed relationship. Because "low income does not occur randomly," pre-existing differences between families need to be incorporated into the equation to assess the relative influence and strength of these factors.[182]

Pre-existing differences matter, and can obscure the nature of seemingly straightforward relationships. Children of disadvantaged families are more "likely to have home environments or face other challenges

which would continue to affect development even if family income rose substantially."[183] Parents with drug and alcohol dependence, for example, could contribute to the future poverty of their children because this addiction may have a negative and simultaneous impact on the parent's ability to parent well, and to get and hold a job. As we saw in the section on poverty within a lifetime, "larger families are more likely than smaller families to experience persistent poverty and ... families with very young children are more likely to experience persistent poverty than families with older children."[184] But, because larger families are also more likely to have younger children, we need to control for one or the other factors to work out which (or both) is driving the persistent poverty.[185]

7.3 Potential causes of future poverty and hardship

There is a rich international literature surrounding the relationship between parental income and children's current and future outcomes (including poverty). Economist Dr. Simon Chapple, writing for the OECD, summarised the findings of the literature, which will be fleshed out in the remainder of the section:[186]

- Controlling for essentially pre-determined covariates like parental age and education reduces the size of raw income effects on child well-being.[187]
- After controlling for covariates, the effect of income on child well-being is small compared to other child-outcome-related factors like parents' education
- The consensus is also that some of the remaining relationship of income to child well-being is causal. But in terms of effect sizes, the causal effects are modest.
- Effects in early childhood are typically larger than in late childhood [188]
- Effects of income on child well-being are stronger for some outcomes than for others—for example they appear larger for cognitive ability and education outcomes than for behaviour and for health outcomes (both physical and mental).
- Income effects on child well-being are stronger for children in poorer families.[189]

High-quality evidence from New Zealand supports Chapple's claims. As Chapple and co-author Prof. Jonathan Boston conclude in their book, *Child Poverty in New Zealand*:

> While there may be no single cause of poor child outcomes, it is clear that both ***poverty*** and ***other factors*** influence the way children grow up. There is a robust body of evidence that suggests that the income of children's families directly causes important future outcomes. There is a complementary body of evidence that suggests other influences are more important, including parenting quality, and they serve to diminish the raw impact of income...good outcomes for children are not simply about adequate family incomes. Those interested in disadvantaged children's lives need to consider seriously the quality of parenting, schools and neighbourhoods. [190]

7.4 Predictors of future economic outcomes – New Zealand research

Just what combination of poverty and other factors influence the way children grow up? Using data from the longitudinal Christchurch Health and Development Study (CHDS) that follows a cohort of people born there in 1977 (now in their thirties), Joseph Boden, David Fergusson and John Horwood assessed which individual and family factors—both past and present—most accurately predict family economic outcomes at age 30.[191] The factors are shown in the second column in Table 9 below.[192]

Table 9: Associations between measures of economic outcomes at age 30 and predictors.

Domain	Factors	Family Economic Outcomes	
		Income at 30	Living Standards at 30
Family background and individual factors (childhood)	Paternal occupation	-	-
	Childhood living standards	Modest (0.10)	Modest (0.13)
	Childhood parental income	-	-
	Parental education	-	-
	Māori ethnicity	-	-
	Gender	-	-
Education/cognitive ability	Education level	Modest (0.15)	Indirect (0.04)
Current household and family characteristics (adult)	Income at 30	n/a	Strong (0.27)
	Number of earners[193]	Strong (0.36)	Weak (0.09)
	Number of dependent children	Strong (-0.26)	Weak (-0.09)
	Becoming a parent before 20	-	-
	Single parenthood	-	-
Mental Health and substance abuse (adult)	Mental health problems	-	Strong (-0.23)
	Substance abuse	-	Modest (-0.15)
	Total explanatory power	39%	33%

Source: Adapted from Joseph M. Boden, David M. Fergusson and L. John Horwood. "Pathways to economic outcomes at age 30: Income and living standards in a New Zealand birth cohort," *New Zealand Sociology* 28, no. 3 (2013), 125.

All of the factors listed in the second column were significantly associated with family economic outcomes (income and living standards) at age 30.[194] The third and fourth columns show the strength of associations after adjusting for potentially confounding individual, family, and social factors. The outcomes listed with weak to strong associations remained significant after the adjustment; those with dashes were no longer significant suggesting they are more likely indicators than causal factors. Important findings include:

- Current income has the largest influence on current living standards. While the relationship isn't perfectly one-to-one, income explains a large amount of the variance in living standards.[195]
- The current number of earners and dependent children in a family are the most robust predictors of current family income. This suggests *current* family characteristics are more influential than *childhood* family background and individual factors.
- Childhood education and living standards explain a relatively modest variation in income: they are still predictive and deserve attention.
- Family income during childhood, once adjusted, was no longer directly related to future family income or living standards using this particular model.[196] This data suggests that family income during childhood is more an indicator than a causal factor for future poverty.
- Similarly, once adjusted, being Māori was no longer predictive of future economic well-being. This potentially surprising result stems from the fact that being Māori is strongly associated with a number of factors that predict lower living standards, such as living with dependent children and socio-economic disadvantage in childhood.[197]

The authors of the study said their research "suggested that income [at age 30] was largely a function of earning power (number of earners) and family commitments (number of children), with education and family living standards in childhood playing a relatively modest role."[198] They also note that these findings are:

> ...in general agreement with a range of research suggesting that economic outcomes are at least in part determined not only **by earning power**, but also preparation for the workforce via **education**, reliability and dependability as influenced by levels of **mental health** and **substance use disorders**, and **family background and individual factors**

Table 10: Adjusted associations between childhood family income (age 0-10) and measures of educational achievement, economic advantage.

Adult Outcomes by age 30	Childhood family income quintile age 0-10				
	1	2	3	4	5
Educational Achievement					
% Attained high school qualifications	76.4	79.9	83.0	85.8	88.2
% Attended university	39.9	42.9	45.8	48.8	51.8
University Degree	22.6	25.1	27.8	30.7	33.7
Economic Advantage					
Mean gross personal income	42,534	45,471	48,409	51,346	54,284
% Economic hardship (ELSI)	11.7	9.0	6.8	5.1	3.8

Source: Adapted from Sheree J. Gibb, David M. Fergusson and L. John Horwood. "Childhood family income and life outcomes in adulthood: findings from a 30-year longitudinal study in New Zealand," *Social Science & Medicine* 74, no. 12 (2012): 1984.

that influence both the choice of work undertaken and expectations regarding adequate living standards.

This summation supports our findings earlier regarding the importance of labour market and family events and characteristics on the length of a poverty spell. At the same time, it also brings into question the link between family income during childhood and future family economic outcomes. But while current circumstances are more accurate predictors of current family economic outcomes, just how important are childhood circumstances, and in particular, poverty experienced in childhood?

7.5 Links between childhood poverty and future poverty – New Zealand research

A second important study utilising the CHDS data investigates the **link between childhood family income and future personal income at 30**, seeking to untangle the relative effects of low family income in childhood and other factors that might lead to poverty and other poor outcomes in the future.[199] Current household and family characteristics were not considered as dependent variables in this study. They found that low family income during childhood was associated with:[200]

- Later lower educational achievement,
- Poorer economic circumstances,
- Higher rates of criminal offending,
- Higher rates of mental health problems, and
- Higher rates of teenage pregnancy.

After adjusting for covariates (family background and early life circumstances like child intelligence or parental education), the links *disappeared* between low family income and mental health, offending and teenage pregnancy—these relationships were explained by the covariates.[Δ] Using this model, **the relationship between low family income and both lower educational achievement and poorer economic circumstances in adulthood, while diminished, *remained* and was significant, suggesting a potential causal relationship exists.**[201] This indicates that growing up in a poor family "poses a barrier to future educational and academic success independently of the child's academic ability and family context."[202] According to this evidence, poverty experienced as a child is likely to be a small to modest independent causal factor leading to poverty in the future.

Table 10 shows the extent of this effect. It displays the estimated adjusted relationships between childhood family income and adult measures of educational and economic outcomes ordered by income quintiles—1 being the lowest, 5 being the highest. The adjustment here involves making an assumption that all the cohort members scored the same for the covariates.[203]

Δ The covariates were: maternal education; paternal education; maternal age; family socioeconomic status; pregnancy planning; parental ethnicity; single parent family; family church attendance; family size; Concurrent covariates: parental history of offending; parental history of illicit drug use; parental history of alcohol problems; changes of parents age 0-10; inter-parental conflict age 0-10; child conduct problems age 7-9; child attentional problems age 7-9; child IQ age 8/9; childhood sexual abuse (<16 years); childhood physical abuse (<16 years); teacher-rated academic progress age 7-10. Sheree J. Gibb, David M. Fergusson and L. John Horwood. "Childhood family income and life outcomes in adulthood: findings from a 30-year longitudinal study in New Zealand," *Social Science & Medicine* 74, no. 12 (2012): 1979-1986

Educational achievement and economic advantage rise as childhood family income rises. These relationships are relatively linear, suggesting "an intergenerational transmission of educational and economic privilege in which increasing childhood family income was associated with increasing educational and economic privilege even after adjustment for a wide range of childhood, family and related factors."[204] Research using data from the Dunedin Multidisciplinary Health and Development Study backs the findings from the work in Christchurch, indicating that: "on average, the childhood income of people's parents explains a modest proportion of the variance in their adult income compared to other possible explanatory variables."[205]

When it comes to children's development, the timing of this income matters too. Parental income received while children are younger appears to have more impact than later in life, when children reach their teenage years for example.[206] The early years are crucial. New Zealand research using data from the Dunedin cohort study shows that better socio-economic circumstances in adulthood were unlikely to counteract or undo all the negative effects of poverty in childhood, underscoring how critical children's early years are for their development and outcomes when they grow up.[207] As in many other policy areas, prevention appears to be better than cure.

Overall, the New Zealand evidence offered here lends support to the findings that **family income during childhood plays a small to modest role on future outcomes**—the precise influence depends on which models are used.

Like in the trigger events section, it is important to note that a large proportion of the relationships over time and across generations remain unexplained by the variables in the statistical models, limiting the overall predictive power. In this case only 40 percent was explained. This means that there are possible explanatory variables missing from the equation and that economic factors are only partly responsible for future outcomes.[208]

7.6 Experimental evidence – beyond correlations

Longitudinal cohort studies like those from Christchurch and Dunedin give an indication of the nature of the potential causal relationships at play, but they are second-best when it comes to more robust evidence that experiments can provide—these constitute the "intervention" type of evidence mentioned in Section 3 above. There have been **no natural or quasi experiments** undertaken in New Zealand to date. Most of the existing literature takes advantage of policy changes that increase the income of some families and not others, and are usually conducted in the United States.[209] **Experiments like these tend to find stronger effects of childhood income on future outcomes (particularly cognitive and educational) than those using regression models, but the results are generally still modest.**[210] Promisingly, the results of a forthcoming experiment led by University of California, Irvine Professor Greg Duncan, which will give some young mothers $4000 a year and a control group a smaller amount, will likely shed unprecedented light on the extent of income's effect on family behaviour and children's development.[211]

7.7 Theories of transmission across generations

Theories are needed to understand the potential mechanisms and causal processes present in the associations between the many variables that are examined in these large research programs.[212] There are several theories that seek to explain how poverty experienced during childhood influences future outcomes.

Education, for example, has been found to play a significant mediating role as a transmission mechanism for intergenerational poverty, with New Zealand research suggesting "just under half of intergenerational income persistence was attributable to the length of time spent in the education system."[213] But it doesn't make much sense to talk of education "causing" future income for example; there needs to be a theory that can be empirically tested and based on the actual actions of the people involved to link the two concepts.[214] In this example, education could improve knowledge and skills, it could signal competency and reliability to would-be employers and so on. Without a plausible theory a causal link cannot be made.

Besides education, some call the remainder of the identified transmission mechanisms a "black box."[215] Inside the box we would find a tangle of genetics; wealth; neighbourhood and social conditions; ethnic origins and race; gender of siblings; birth-order, family size and family structure; health status; non-cognitive abilities (conscientiousness, honesty, and persistence, for

example); labour market connections; family dynamics and parenting; and the formation of preferences and aspirations.[216]

7.7.1 Three dominant theories for intergenerational poverty transmission

When it comes to intergenerational poverty transmission—that is, poverty in one generation causing poverty in the next—economists, sociologists, and developmental psychologists emphasise different pathways. In the main, there are three dominant theories for *how* poverty is transmitted across generations:[217]

- **Material/resources and investment:** A lack of resources—both time and money—constrains parents from investing in their children by providing everything from more nutritious food, to better housing/neighbourhood and more learning opportunities.
- **Psycho-social/family and environmental stress:** Stress resulting from a constant struggle to pay bills and put bread on the table, combined with the whole host of life shocks that are more common in poor families, takes a physical and mental toll on parents, and subsequently, their children's development.[218]
- **Cultural/Culture of poverty:** Norms and behaviours like poor self-control and a lack of the ability to delay gratification along with feelings of hopelessness are transmitted from generation to generation, resulting in adverse outcomes.

7.8 Discussion

The evidence supporting these theories, like in other sections, is mixed and complex. The OECD finds more evidence to support the theory that resources and investment have a significant effect on children's outcomes rather than the theory of parental stress.[219] Resources and investment also tend to be more strongly associated with children's cognitive ability, while parental stress was more strongly linked to children's behavioural problems. While the literature is clear that there is a solid link between resources available in a family and the amount of investment in the child, it is not so clear on the extent of the independent effect of parental income on future outcomes as we've just seen.[220] Nobel Laureate economist James Heckman found that when it comes to children's development, the "causal evidence of an importance [sic] role for credit constraints is weak... Parenting matters much more than parental income."[221]

Cultural explanations are more difficult to examine than investment or stress pathways, but the evidence does suggest that aspirations, attitudes and values are passed, to some extent, from generation to generation.[222] This is evident in research that suggested that worklessness is associated with poor educational outcomes for children, even when parents' income and educational level is controlled for, potentially as a result of "role-modeling."[223] New Zealand evidence suggests that a "socialisation process" works through "exposure to parental role models, the development of life course expectations and aspiration which lead[s] to an intergenerational transmission of economic advantage and disadvantage."[224]

There is no single pathway through which income affects outcomes. Plausible evidence supports the conclusions that to some extent all three pathways contribute, that there is significant interaction between them and that different mediating variables are at play for different outcomes.[225] Investment-based explanations appear to explain the overall relationship better than stress-based explanations; cultural explanations may surpass both once research methods mature. Again, more research is needed to make more definitive claims on the relative strength and nature of the causal chains linking childhood poverty to future poverty.

8. POVERTY-RELATED FACTORS FOR FAMILIES IN THE FUTURE – INTERNATIONAL EVIDENCE

Like the "Within lifetimes" section above, we now turn to findings from the UK DWP on the relative influence of factors and causal pathways for future poverty to complement and put into conversation with the New Zealand evidence. It is worth reiterating that this evidence is UK-based, and if additional research was undertaken here the relative influence of factors may differ.[226] Based on analysis of cohort studies and investigation into potential causal links, their findings on "factors making some poor children more likely to become poor adults" are included below and are evaluated using three criteria:[227]

- Certainty: Does it have an effect? How clear is the causal relationship?
- Strength: How large is the effect? How strong and direct is the impact?
- Coverage: How many are affected? How widespread is the impact?

Looking at the three criteria together helps add texture and nuance to the findings. Drug and alcohol dependence, for example, is strongly associated with low family income in the future as the regressions picked up, but the impact is limited to a small proportion of families, and the evidence supporting the causal relationship across generations is limited as well.

Table 11: Relative influence of factors on future poverty

Factor	Certainty	Strength	Coverage
Child Educational Attainment	High	High	High
Parental Qualifications	High	Medium	High
Childhood Poverty	Medium	Medium	High
Home Learning Environment, Parenting Styles and Aspirations	Medium	Medium	High
Non-Cognitive Development	Medium	Medium	High
Parental Ill Health and Disability	Medium	Medium	Medium
Child Ill Health	High	Medium	Low
Long-term Worklessness & Low Earnings	Medium	Low	High
Family Size	Medium	Low	Medium
Neighbourhood	Medium	Low	Medium
Family Instability	Medium	Low	Medium
Drug & Alcohol Dependence	Low	High	Low
Housing[228]	Low	Low	Medium
Debt	Low	Low	Medium

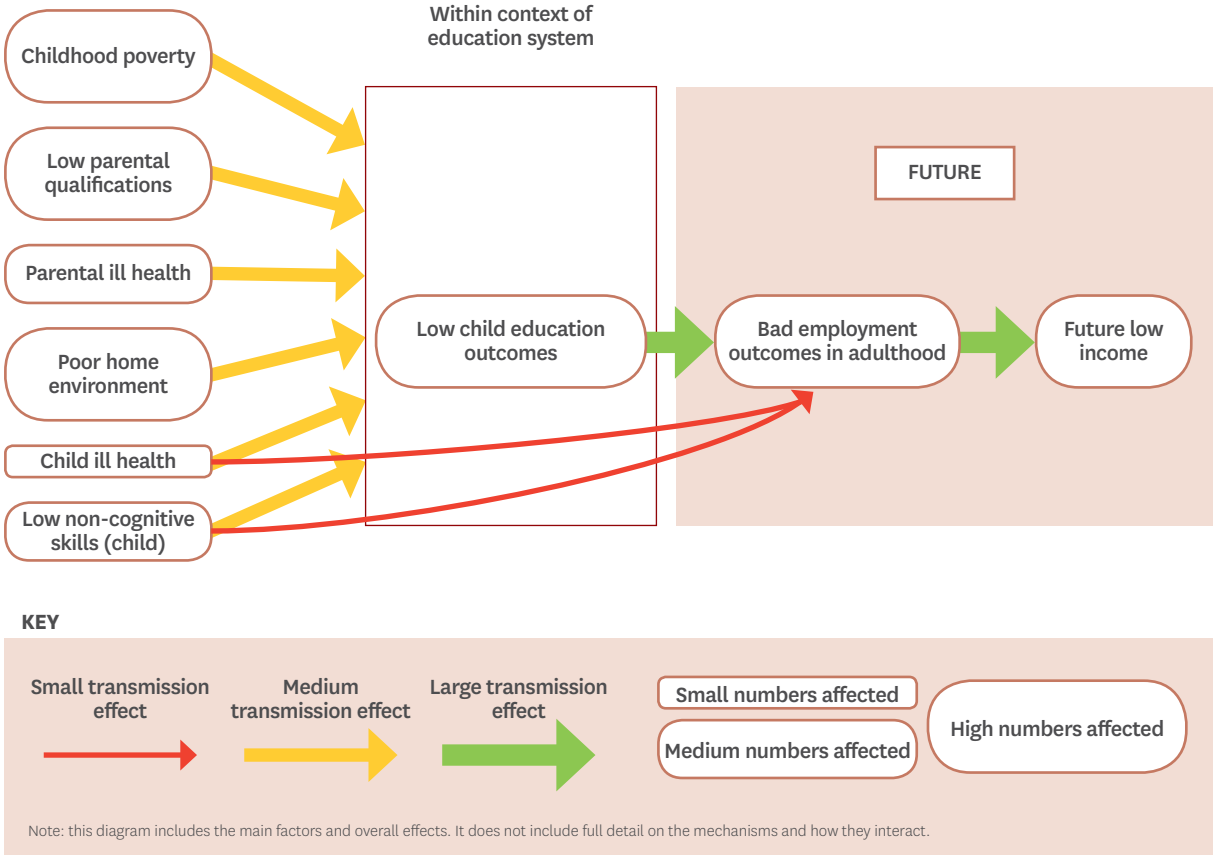
Source: Department of Work and Pensions, An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults, (HM Government, 2014), 8.

According to this evidence, **low educational attainment is the primary cause of poverty for families in the future**. In other words, educational attainment explains the greatest share of intergenerational mobility: the association between income for parents now and their children in the future.[229] The potential causal link is clear and well-established, low educational attainment during childhood limits a child's potential to gain and maintain a well-paid and stable job in the future.[230] Many argue that the strength of this association has increased over time as globalisation and technological advances have reduced the demand for unskilled labour (a particular concern for those from disadvantaged backgrounds) and increased the return on education and credentials in the marketplace.[231] As employment is the key to avoiding and escaping poverty for working-age families, a lack of education poses significant risk for the generations to come. For a matrix of studies and their findings on factors underpinning intergenerational income mobility, see Appendix 2.

8.1 Potential poverty-related causal pathways for families in the future

Figure 11 shows the potential causal pathways in Table 10 above in more detail: how low parental qualifications, home environment and parenting styles and aspirations, non-cognitive development, poor parental health, and childhood poverty itself flow, to a greater or lesser extent, through the child's potential for educational attainment. Education improves the chances of future employment for children when they grow up, leading to the benefits described in the within lifetimes section.

Figure 11: Potential causal pathways including size of group affected and transmission strength for factors making poor children more likely to become poor adults.



Source: Department of Work and Pensions, An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults, (HM Government, 2014), 9.

We see that the majority of the factors do not *directly* influence future income; the factors on the left hand side of the figure are intermediate or indirect pathways and act through the child's experience of the educational system.¶ An intermediate pathway is like a link in the causal chain. Low parental qualifications influence the children's home learning environment.[232] A rich home learning environment (including parenting styles and aspirations) improves children's cognitive ability and non-cognitive skills.[233] Parental ill health, particularly psychological, can negatively influence the home environment. Childhood poverty limits parents' ability to invest time and money into their children resulting in a negative cumulative effect on a number of hardships and social and cultural capital. These pathways are related, yet distinct from the within lifetimes process.

8.2 Educational achievement and intergenerational poverty

The intermediate pathway between **childhood poverty and educational achievement** later in life is, however, contested and worth discussing. Being brought up in a poor family does appear to negatively impact children's future educational success independent of their intelligence or family background. New Zealand evidence found that while "[s]ocio-economic status at birth was strongly linked to later economic resources, there was no direct pathway from economic resources to later educational achievement."[234] Instead, the primary explanatory factors from this study were individual cognitive ability, child behavio[u]r, and family aspirations.[235]

8.2.1 The home environment

These explanatory factors depend largely on the nature of the home environment. Families fulfil several roles in the home: they care, nurture and support; manage resources; provide socialisation and guidance, and provide identity and sense of belonging.[236] It is critically important for a child's development that their parents can perform these roles well. When it comes to education, research suggests that parenting explains somewhere between a third and a half of the school readiness gap between children in low and high-income families.[237] Parenting includes both parenting style, where maternal sensitivity and nurturing is of particular importance, and a rich home learning environment, where quality time, educational resources, and teaching behaviours help boost children's development.

Parental educational attainment is one of the greatest predictors of a child's educational outcomes. Of the 7 percent of children living in households with no formal qualifications, just over half of these households are in poverty. In a New Zealand-based longitudinal study, economist Tim Maloney concluded that "family income still matters for determining whether a youth leaves education without a qualification, but the direct effect of parental qualifications is considerably more important for this outcome."[238] The magnitude of the impact is significant too. "Having school-qualified parents," writes Maloney, "has the equivalent impact on the probability of the subject having a qualification of an increase in mean family income of $38,000 (an increase that would almost double the mean income of the cohort members).[239] The probability that this child will end up unqualified is also reduced by 13.3 percentage points.

8.2.2 Cognitive and non-cognitive skills

The prominent focus on educational attainment can tend to "disguise" the critical role of cognitive ability and non-cognitive skills in the transmission of income across generations—a process largely dependent on an enriched home environment with healthy, well-functioning parents.[240] Cognitive skills like literacy and numeracy have been shown to be associated with higher earnings regardless of educational attainment.[241] Non-cognitive skills (sometimes called character skills) include self-control, inter-personal skills, and perceptions of self-worth and control over life. Cognitive skills tend to be better predictors for educational and economic success than non-cognitive skills, yet both are important.[242] Recent studies attribute around a third of the differences in educational attainment to non-cognitive factors.[243] Non-cognitive skills are critical because they have the capacity to foster cognitive skills like memory, language, and problem-solving (usually approximated by IQ), potentially leading to cumulative educational and economic advantages.[244] Studies suggest that they also seem to matter more for those in lower incomes than those higher on the income distribution.[245] Because it is

¶ A child's ill health and low non-cognitive skills are exception here, as evidence suggests these impact future employment outcomes independent of educational attainment.

difficult to define and measure these skills, there is still a long way to go before definitive findings will arise from the research, but regardless, it remains a promising area worthy of further exploration.[246]

8.3 Summary

Poverty scars across generations. Evidence presented in this section has underscored just how deep an inheritance parents leave their children. New Zealand's overall intergenerational mobility is around the OECD average, though it is likely that there is a worrying persistence across generations at the bottom of the income distribution, meaning that someone who experienced poverty during childhood will be likely to experience poverty in the future.

We have examined evidence on whether poverty in childhood causes adverse outcomes—including poverty—in the future. While much of the evidence is mixed on this relationship, as Brooks-Gunn and Duncan concluded from their early research: "income effects are probably not due to some unmeasured characteristics of low-income families, family income, in and of itself, does seem to matter."[247] The effect also appears to be causal and its relative importance appears to be increasing as time goes on.[248] But while a causal relationship exists between poverty in childhood and later outcomes, the effect size of childhood income is small to modest—other factors like the quality of parenting appears to play a more significant role. D'Addio writes that the effect of income "is less important than that of a wider set of parental characteristics…[t]hese include the home and social environment where the children are raised and where their beliefs, attitudes and values are shaped."[249] Both family environment and genetic inheritance are equally important for the transmission process.[250] Education plays a significant role as a transmission mechanism.

Much of this evidence is based on statistical analysis rather than experiments following interventions, which means we must be cautious when making strong causal conclusions. The unexplained proportion is also significant, but going beyond mere correlation has shown the relative importance of income and other factors. More experimental studies would be of great benefit in New Zealand and overseas.[251]

9. REFLECTIONS AND RECOMMENDATIONS

A clearer understanding of how poverty "works" helps to guide a better, more dynamic response for struggling New Zealand families. We simply cannot afford to "fly blind" for any longer; the costs, both social and economic, are too great.[252] These costs are intergenerational, which means our solutions need to be too. Because the wellbeing of one generation is to some extent bound by decisions and events of those who have gone before, we need to start making wiser, more-informed decisions in the House and in our homes for our children and our children's children.[253]

The relationship between poverty and negative outcomes both now and in the future is established and clear, but untangling the causal factors and direction has proven to be a much more difficult task. Structural and individualistic factors conspire together: people's decisions—wise and unwise—are shaped and made in a particular context. "We are all sedimentary creatures," writes Law Professor Robert Fishkin, "our abilities and disabilities, our preferences and values, and our character traits all arise through layer upon layer of dynamic interaction between self and environment that build us, gradually over time, into the people we are."[254] Because of this complexity, the picture that is painted from the evidence is more impressionist than realist. We would do well to avoid over-simplifying or over-exaggerating the nature and causes of poverty in public discourse—hyperbole, false dichotomies and blame games tend to lead us further away from the truth, and subsequently, further away from successful solutions.

This paper has shown how incredibly dynamic poverty is in New Zealand, both within lifetimes and across generations. Over time, poverty touches many more lives than one might expect—more than the prominent point-in-time figures would suggest. The apartment building and the hospital ward illustrations serve to show how poverty is a "seeming paradox," as the OECD describes it, "simultaneously fluid and characterised by long-term traps."[255] Most families' experience of poverty is short with limited consequences (in large part thanks to the ameliorating effect of the benefit system) but, sadly, many remain trapped for extended periods of time. Those trapped in persistent poverty are left with the greatest scars.

Uncovering the roots of poverty is only a first step, getting at them through policy is next. The complex nature of the problem combined with the exploratory nature of this paper means that the recommendations that follow are more broad principles and suggested directions than specific policy solutions. These principles and directions both challenge how we—as policy-makers and researchers—have done things in the past, and offer us some direction as to how we might respond in the future.

9.1 Challenges for policy-makers

Because persistent poverty leaves the greatest scars, preventing families from falling into long-term spells of poverty and helping them out if they are there should be the primary focus of poverty-alleviating policy now. Minimising the extent that poverty is passed on from one generation to the next—intergenerational poverty persistence—should be the focus for poverty in the future.

9.1.2 Poverty dynamics

Our policy priorities should be backed by solid evidence, not attention-grabbing headline figures or ill-considered causal theories. The substantial streams flowing into and out of poverty need to be understood clearly by policy-makers, alongside a greater appreciation for the relative influence of the myriad different factors causing it.[256] A simplistic cross-sectional, one-size-fits-all approach to those in poverty doesn't reflect reality by ignoring the large proportion of families shifting into and out of poverty, which can lead to ineffective—and potentially harmful—interventions that will likely fail to make a long-term dent in persistent poverty figures.[257] Similarly, a failure to make clear distinctions between the causes and indicators of poverty can lead to poorly-targeted policies that don't get to the root of the problem. Prioritising the most disadvantaged means we need to reduce persistence and increase upward mobility at the bottom of the income spectrum.

9.1.3 Work and education

From the evidence considered, a renewed focus on improving the lives of struggling families now and in the future through work and education should make an appreciable difference towards this end. The focus on struggling families is important as policies should be targeted and tailored to those in, or at risk of, persistent

poverty. Broad policy solutions may benefit the majority of families, and in some cases, just the better-off, but fail to reach and help those who face a number of challenges and have complex needs.[258]

Our recommendations fall broadly under the domains of **work** and **education**. Findings and policies that focus on the nature and role of **family** are critical too, and are intertwined throughout both domains.

9.2 Recommendations – work

Worklessness and low earnings are the primary drivers of poverty for families **now**. As poverty is about a lack of resources (mainly income), and work is the primary means of attaining resources in a market economy, it makes sense that a lack of work or low earnings is a significant causal factor. "Low parental qualifications; drug and alcohol dependency; parental and child health problems; and family size and instability" all contribute to and mediate this pathway.[259] Jobs, particularly full-time, stable, and for both parents remain the "surest route out of poverty" for families. As such, policy should continue to encourage "work for those who can" (and need to), while at the same time balancing this imperative with the importance of nurturing children, particularly while they are younger.[260]

9.2.1 Job retention is key

Getting parents into work, keeping them there, and ensuring the work is stable and sustainable is crucial. Research by the OECD suggests that getting more parents into work would result in the greatest reductions to the child poverty rate.[261] Bolstering labour market outcomes should remain a policy focus, with particular emphasis on families with a larger number of children and young parents given their high relative risk. Because losing work is the most prominent trigger event for families falling into poverty, policy should not solely focus on getting people off benefits or into jobs as it has tended to in the past. Job retention is a critical yet often-overlooked area: making sure the work is sustainable with decent hours and wages should also be a priority to safeguard against re-entry into poverty.[262]

9.2.2 A renewed focus on up-skilling

Finding work is harder for some, particularly parents with low skills and poor qualifications—those most likely to be unemployed and in poverty. As Director of Centre for Research in Social Policy in the UK Donald Hirsch writes: "[w]here parents have to make a choice between low income and long hours, it is difficult to give children good life chances."[263] Policy areas for focus could include skills development and investigating ways to give parents in this situation preference in the active employment system. When those less skilled do find work, they tend to be on lower wages. Raising the minimum wage is unlikely to be effective as only around twenty percent of families with a worker earning the minimum wage have children, and because most of those that do are on benefits, abatement rates mean that the difference in take-home income will likely be negligible.[264] Programmes that boost skills are a more sustainable, longer-term solution, but will take time to gain traction. Businesses have a role to play to improve job prospects and wage levels within the organisation with training and paths of career advancement, and affording more flexible working hours where appropriate.[265]

9.2.3 Getting behind sole parents

Sole parents are also of great concern in New Zealand when it comes to unemployment. Losing a worker is much more likely to plunge families with children into poverty than other factors. While New Zealand has an above-average female employment rate internationally, the sole parent employment rate of 50 percent is one of the lowest in the OECD and significantly trails behind the OECD average of 69 percent.[266] The chance of exit from poverty for sole parent families when contrasted with couple families is also low when compared internationally.[267] Decisions "to work or not to work" were found to be more important than changes to hours worked for sole parents already in work, meaning work itself rather than wages is key. Issues like additional travel and childcare costs, sick children and school holidays will need creative solutions. Again, investigation into more flexible working hours and improving availability of affordable, quality childcare solutions for these parents are potential ways forward here. Expanding paid parental leave is likely to have little effect on persistent poverty as parents in that situation are unlikely to have the kind of stable work where leave is an entitlement.[268]

9.2.4 Strengthening families

Strengthening families should also be a priority. As the Brookings Institution researcher Isabell Sawhill writes,

"social policy faces an uphill battle as long as families continue to fragment and children are deprived of the resources of two parents."[269] Indeed, the EAG claims that "[p]art of New Zealand's comparatively mediocre child poverty performance is almost certainly due to the higher than average rate of sole parenting," with 21 percent of New Zealand children living in sole-parent families compared to the OECD average of 16 percent.[270] Historically, government policies that attempt to promote stable relationships or delay parenthood have had mixed results.[271] This may reflect that changes to family structure over time are more the result of cultural rather than legislative forces. Family, counselling and relationship support have the potential to reduce conflict, improve family functioning, stability, and overall well-being and so these measures deserve greater attention.[272] More serious evaluation of their effectiveness is also required, however, as many of the programmes in New Zealand have not been subject to rigorous, evidence-based review.[273]

9.2.5 Supporting non-resident parents

Supporting non-resident parents (overwhelmingly fathers) ought to be subject to increased policy focus, an aspect usually neglected in discussions on policies aimed at getting sole parents into work. Around a third of child-support payments are missed or delayed, according to the IRD, putting sole parents at risk.[274] To reduce poverty and the associated damaging inter-parental conflict, both improving employment incentives and opportunities for non-resident parents to better support their children financially and encouraging relationship and counselling support to promote emotional involvement where possible should be investigated.[275] The broader objectives underpinning the current child support system in New Zealand have been described as "a dog's breakfast" and require review as well.[276]

9.2.6 Balancing work and benefits

While the focus here is on work as it is the most effective pathway out of poverty, the tax and benefit system also plays a significant role in determining the extent that work matters for family's outcomes. The increase of the poverty rate for sole parents following the reforms of the early 1990s is a stark example of this.[277] The gap between income from the labour market and benefits has grown over the past few decades, in large part due to benefits not being linked to average wages like New Zealand Superannuation is.[278] While the Government has recently increased benefits through the Child Hardship budget package, an ongoing indexation to median wages should be considered. Policies that seek to reduce unemployment also "need to be formulated in ways that prevent the growth of working poverty."[279]

A balance also needs to be struck regarding the relative policy focus and timing of employment and benefits. Boston and Chapple recommend that a benefit strategy be given weight when children are younger, and an employment strategy as they grow older.[280] This makes sense, with the growing body of evidence surrounding child development supporting this approach. In the long run, however, international evidence tends to reinforce that policies designed to improve "adult economic independence in any kind of family type show higher effect on reducing poverty risk in the short to long-term than those focused on the family income as a whole."[281] Because of our levels of unemployment and market income poverty, reducing poverty primarily through raising benefits rather than reducing parental unemployment is relatively costly and inefficient for New Zealand when compared with many other countries and as the OECD points out, would do little to increase skills and productivity.[282]

Given the "strong relationship between parental income, early employment, and future earnings," focus should also be placed on supporting the transition from school to work to build a strong economic foundation for families of the future.[283] Early contact with the benefit system has been shown to be a strong predictor of future long-term benefit receipt.[284] The employment participation rate for 15-24 year olds in New Zealand has also dropped relative to other age groups over the past decade—signifying a weakness in this area.[285] Apprenticeships, on-the-job training, and professional partnerships are potential avenues for further exploration. Education lies at the heart of intergenerational mobility, particularly at the bottom of the spectrum.

9.3 Recommendations – education

It is also no surprise that **children's low educational attainment** is the primary driver of poverty for families in the **future**.[286] New Zealand and international evidence suggests that educational attainment explains a large proportion of intergenerational income mobility and therefore intergenerational poverty. The link across the

life course between education and eventual employment is strong and well-established—a child who struggles at school will likely have low skills and qualifications when they grow up, making it harder to get and keep a stable and well-paid job in the modern, service-oriented economy and eventually, provide for their family. "Low parental qualifications, parental ill health, child ill health, the home environment, children's non-cognitive skills and childhood poverty itself" all contribute to and mediate this pathway.[287]

9.3.1 A greater focus on disadvantaged children

The pathway between education now and work in the future depends in large part upon how effective the educational system is at pushing against socio-economic barriers; otherwise it can simply perpetuate and sometimes amplify inequalities.[288] Education should not just be a means for those with advantaged backgrounds to get further ahead. Unfortunately, unlike countries like Canada, Finland, Japan and Korea, comparatively, New Zealand's system is notoriously bad at improving outcomes for disadvantaged children.[289] Understanding why this is and doing something about it should be another policy priority, as it is a crucial aspect to breaking intergenerational cycles of poverty in New Zealand

9.3.2 Improving skill formation key

A significant proportion of factors that influence children's development and educational attainment—some claiming up to eighty percent—lie outside of school grounds, however.[290] Early experiences of poverty, for example, particularly before the age of five, have consequences for future educational and behavioural success.[291] Family background and early life circumstances are crucial for a child's development and school-readiness. An enriched home environment with healthy, well-functioning parents who are engaged and invested in their children supports this process. As James Heckman and Flavio Cunha write:

> Skill formation is a life cycle process. It starts in the womb and goes on throughout life. Families play a role in this process that is far more important than the role of schools. There are multiple skills and multiple abilities that are important for adult success. Abilities are both inherited and created, and the traditional debate about nature versus nurture is scientifically obsolete.[292]

These skills not only have the potential to help children to develop cognitive skills like literacy and numeracy and form the foundation for educational attainment, but to enhance employment opportunities as well. Employers are increasingly valuing non-cognitive character or "soft skills" for workplaces of the future.[293] Recent findings from the US suggest that while short-term improvements to achievement and behaviour at school from early childhood education tend to fade as time goes on, there appear to be long-run improvements on adult employment outcomes.[294] This could suggest that social and emotional skills fostered early on largely lay dormant through school where "hard" literacy and numeracy skills are accentuated, only to be eventually re-awakened in the workplace. Therefore, a "whole of child" development strategy that promotes character skills alongside academic achievement should be a complementary policy focus to help improve school readiness, performance and eventual economic success for those on low incomes. Policies could work at several levels across the life course: in early years through parental education that targets parenting style and the home learning environment, early childhood education, and later, in primary and secondary schools. There is evidence that programs that aim to develop these skills in the early years can be effective.[295]

9.3.3 Two-generation models and family hubs show potential

Families need to be helped as families. A promising and relevant area of work is the "two-generation" model or mechanism, an approach that seeks to develop and assist both parents and their children simultaneously.[296] One potential policy direction that flows from this model is to establish and bolster "family hubs" where services that seek to improve child development and school readiness, parenting aspirations and parenting skills and child and family health are met with "antenatal and postnatal services, information on childcare, employment and debt advice and relationship support," for example.[297] Schools, in partnership with other businesses and organisations could also form "hubs" for holistic, intergenerational support services.

9.4 Income, family background and policy across generations

9.4.1 Boosting family income important yet insufficient

A surprising finding from the intergenerational research was the relatively small to modest effect family income has on a child's later outcomes—both economic and social—once family background and early life circumstances had been taken into account. As Susan Mayer put it, all else being equal, "the things that change when income increases have only a modest effect on outcomes, while the things that have a large effect on outcomes change only a little when income increases."[298] The challenge for policy is that the things that aren't income are difficult to influence.

While income may play a lesser role than we might have expected, sophisticated statistical techniques show that there is still an independent effect on future outcomes. There are several possible explanations for the limited observed effect of income. It may be that the low-hanging policy fruit has already been picked—benefits, active employment and education policies already do significant work to reduce poor outcomes for families and each additional dollar of income they receive is subject to diminishing returns.[299] It may also be that the effect is spread and accumulated across a whole range of outcomes and mediated through a vast number of pathways. Income-based policies are necessarily "multi-purpose policies" that target multiple outcomes in multiple ways, but because each effect is relatively small it makes it difficult to detect the full contribution of income change.[300] Small changes across many domains can make big cumulative differences in children's lives.

9.4.2 Towards a broad portfolio of solutions

And yet, while policies that seek to boost family incomes still have value, the research is crystal clear that they are not "a silver bullet" for improving children's outcomes now and in the future.[301] If we are to invest in children now to improve their lives in the future, we therefore need a broad "portfolio" of interventions.[302] From a policy perspective, we need to address both causes and consequences. As Professor David Fergusson recommended:[303]

> [T]he optimal policy mix for addressing the linkages between income inequality in childhood and later outcomes will require a judicious combination of policies that includes those targeted specifically at reducing income inequalities and policies aimed at addressing the range of social and family problems that occur at a higher frequency in low income families.

9.4.3 Income-based strategies not long-term solutions

It is theoretically true that if the government just provided more income support for low-income families in a way that didn't change the median income, then poverty could be eliminated at that point in time.[304] But the intricacies of dynamics and inheritance within and across generations highlighted in this paper show that this would not be a steady-state equilibrium, that social and family problems (while minimised from the effects of income) will eventually contribute to problems in the future.

If we hold that redistributive efforts beyond the current policies will have limited effect, addressing the host of family background and early life circumstances likely experienced by children in poor families is important. Heckman, again, urges that:[305]

> It is premature to advocate income transfer policies as effective policies for promoting child development...we find that the importance of these factors [the timing of income and lack of resources] in shaping child outcomes has been exaggerated in the recent literature compared to the importance of parenting and mentoring. Untargeted cash transfers are unlikely to be effective in promoting child skills.

9.4.4 Striking the right balance

Since many of the family background and early life circumstances for these families cannot be changed directly through policy—the boat for parental educational attainment or family stability has likely sailed, for instance—policies should aim to mitigate the consequences of these risk factors on families now and to seek to address the root causes for the future. Ensuring that parents have sufficient resources when their children are at their youngest and most responsive to support should remain a policy goal. Yet raising in-work benefits, for example, needs to be complemented with parenting programs and so on.

From a practical and functional perspective, there are few levers that government can pull to address wide-ranging social and family problems. Increasing parenting skills or improving schools requires a lot more effort, but the evidence suggests this is where the lion's share of our work—and potential impact—lies. Increasing incomes through the tax and benefit system, on the other hand, is a much easier lever for government to pull.[306] Getting the institutional balance right here is one of the greatest challenges facing anti-poverty policy.

But because the causes are multidimensional, with no one particular pathway standing out as dominant, solutions need to be tailored to meet families' complex needs.[307] Risk factors are cumulative and tend to cluster over time and become too overwhelming for a family to overcome. This suggests a need for better coordination across and within government and non-government organisations and an increased role for organisations that are better suited to deal with many overlapping problems at once. The Productivity Commission's recent inquiry into More Effective Social Services lays out several possible solutions, including a focus on shifting resources and responsibility to organisations closer to families and increased collaboration and innovation across agencies. While not without its flaws,[308] recent developments on the "investment approach" to benefit reform have helped shift policy discourse to be more forward-looking and focussed on persistence within and across generations. The questions currently being asked and approaches being taken by the Government are good ones—they are on the right track when it comes to seeking better evidence for policy and targeting to those who need it most. This should be commended, encouraged, and refined over time.

9.5 Challenges for researchers

"As our island of knowledge grows," physicist John A. Wheeler remarked, "so does the shore of our ignorance."[309] There is still so much we don't know, particularly in New Zealand. As one researcher put it, "it is easier to say what is not important than to put the finger on the decisive causal mechanisms."[310] Most of the statistical models referenced in this paper explained, at best, around only half of the effects of potential causal pathways, and even then, conclusions remain tentative. This is, in part, because people are beyond measurement; the knowledge reaped by the social sciences is partial at best and misleading at worst. Sociologist Christian Smith urges researchers to shift questions from "what variables tend to be associated" like those driving the regressions referenced in this paper, toward "what is real in social life, and how do its parts work causally to generate outcomes of importance."[311] This means moving beyond, say, education causes intergenerational poverty, towards exploring the mechanisms that mediate that relationship such as the home environment. While we need more of the former, the latter is where the real gains are to be made.

More qualitative, experimental, and evaluative research is needed. Qualitative research is crucial for understanding transitions into and out of poverty as well as for extending the imagination as to what to include in statistical analysis to yield a better explanation of reality. It could also explore core issues like choice, hopes, aspirations, and expectations that are more difficult to access quantitatively.[312] Additionally, conducting experimental studies like randomised control trials in New Zealand would help shed light on the causal mechanisms and the results of policy changes unique to our context; lessons from overseas research are instructive but there are severe limitations with transferring conclusions across international borders. Rigorous evaluations of programmes like those designed to improve parenting skills, for example, would also be of benefit. We have limited our investigation primarily to proximate causes here—this needs to be paired with analysis of broader structural causes as well.

Longitudinal, integrated, and clustered data should also become the new benchmark and deserves more investment than is currently being undertaken. We have seen how much clearer the picture becomes when we can track resources and outcomes over time. Research that identifies clusters of disadvantage should also be a focus, to better understand vulnerable groups and tailor policy more effectively. Treasury's recent work harnessing Integrated Data Infrastructure (IDI) represents a promising future for collaborative and innovative use of data to drive policy. The Finance Minister recently discovered, for example, that while it is commonly acknowledged across government that supporting parents for the first few years of their child's life is critically important, "serious money doesn't get spent until children turn three…it's been a serious revelation…the way we spend the money doesn't match the rhetoric that policy-makers have."[313] Better evidence made this revelation possible.

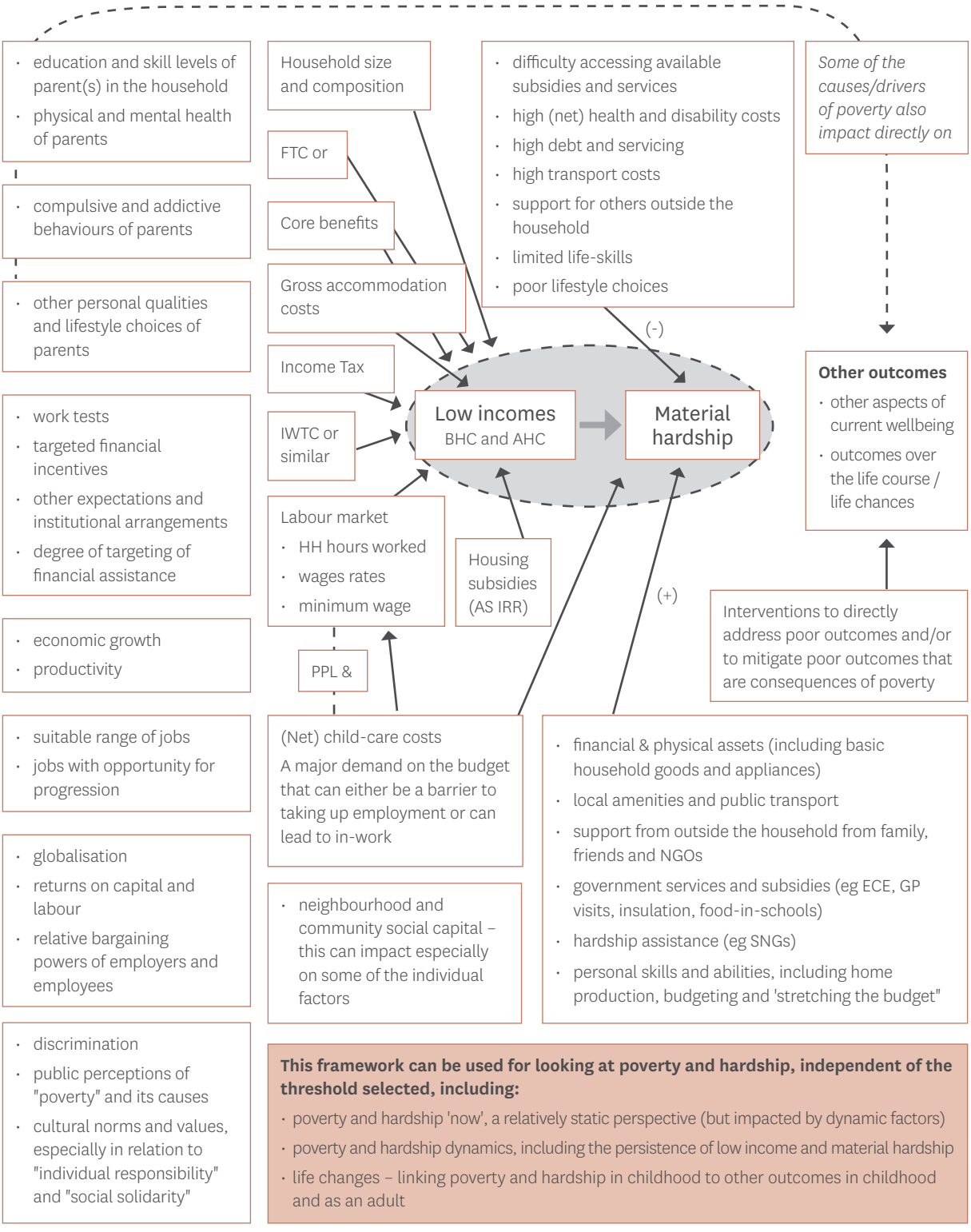
To pinpoint worklessness/low earnings and low educational attainment as key areas to investigate is one thing, but they are only steps in a longer journey. Next steps need to go deeper. With respect to employment, what happens to parents who get a job? How long does the work last for? Which policies can improve job retention? How can we improve the job prospects and wage levels of those with low skills? How can we increase wages for low-skilled jobs? With respect to education, what factors are most important within the family for a child's development? How are these transmitted across generations? Which policy interventions are effective at targeting these factors, if any? What has been done overseas and can it be replicated here? Great work has already been done in these areas, but there is still a long way to go. The stark realities faced by struggling New Zealanders underscores the urgency of this work; the scale and complexity of the challenge means we need to collaborate well if we are to make a real difference.

9.6 Our challenge

A comprehensive, deeper understanding of the factors influencing poverty in families now and across generations will better inform decisions toward a future where New Zealanders have enough resources to participate in and contribute to society; that they might flourish. Families need more opportunities to succeed and the skills to grasp those opportunities, but this isn't enough. They also need a sense of optimism and hope that better lives for parents and their children are not only possible, but also achievable.[314] Overwhelmingly, New Zealand parents with low incomes want to put family first, and deeply want the best for their children.[315] It is our responsibility, as researchers and policy-makers, to help forge and refine a policy environment where this has the best chance of happening. "Tinkering with the system won't help the most needy," as the Productivity Commission argued, so alongside better evidence, political will, vision, and bravery are imperative for policy change that will actually change lives.[316]

Maxim Institute's future research agenda will continue to build upon this work and change the way we think about and respond to poverty in New Zealand. Better evidence is our piece of the puzzle. Given the findings from this paper, we will focus on investigating policies to address worklessness and low earnings to give hope for families now, and low educational attainment and earnings to give their children hope for the future. This is our challenge, and one that we believe will go some way towards turning intergenerational cycles of despair into intergenerational cycles of hope.

APPENDIX 1: MATERIAL HARDSHIP FOR CHILDREN – CAUSES/DRIVERS AND CONSEQUENCES



Source: Department of Prime Minister and Cabinet, Ministry of Social Development and Treasury, Regulatory Impact Statement: Budget 2015 package to address child material hardship in New Zealand, Appendix.

APPENDIX 2: EXAMPLES OF STUDIES SHOWING FACTORS AFFECTING INTERGENERATIONAL MOBILITY

Variable	Effect Size	Effect +/-	Examples	
Education:				
Own schooling or parental education	Large and significant	+(*)	Blanden et al (2006); Osborn (2005); Bowles *et al.* (2005); Rumberger (2006); Blanden (2005a); Piraino (2006)	Differential levels of education – measured by years of schooling – explain between 35 and 50% of intergenerational income correlation across countries (Blanden, 2005a)
Wealth	Large and significant	-	Bowles and Gintis (2002a; 2002b); Bowles *et al.* (2005); Boehm and Schlottmann (1999, 2001); Mazumder (2001, 2002; 2005); Askew *et al.* (2001)	Wealth accounts for more than 30% of the intergenerational income correlation in the United States (Bowles and Gintis, 2002a)
Social Conditions				
Male unemployment rate measured at childbirth, economic activity rate measured at childbirth	Significant and large Significant and large	-(*) +(*)	Palmer (2002); Hertz (2006); Bowles and Gintis (2002a)	Unemployment rates in the local environment at son's birth decrease his permanent wages; a 1% increase in the proportion of unemployed men at the local authority level in 1974 leads to a 1.7% decrease in son's 1991 wages.
Cognitive abilities IQ	Small and significant	-	Bowles and Gintis (2002a); Bowles *et al.* (2002); Blanden *et al.* (2006); Rumberger (2006); Osborne Groves (2005a)	IQ inheritance contributes very little (1-2%) to intergenerational income transmission (Bowles and Gintis, 2002a,b)
Other than IQ: Test scores in mathematics and science; Writing at age 5; Mathematics at age 10;	Significant and large	-	Blanden *et al.* (2006), Rumberger (2006)	Writing at age 5 and mathematics at age 10 concur to explain around 14% of the intergenerational earnings and mobility (Blanden *et al.* 2006)
Other inherited traits Similarities measured among identical twins and fraternal twins	Significant and large	-	Bowles and Gintis (2002a;b);	Through the contribution of IQ is small, genetic factors contribute to around 22% of the intergenerational correlation of income.
Genetically inherited traits other than cognitive skills, (e.g. race)	Large and significant	-	Bowles and Gintis (2002a); Hertz (2005a); Hertz (2006) Mazumder (2001, 2002); Harding *et al.* (2005);	These traits are found to matter. Mobility is lower for Blacks than for Whites (the elasticity shifts for .27 to .49 in Mazumber (2002)).

Variable	Effect Size	Effect +/-	Examples	
Non-cognitive abilities (and personality traits)	Significant and large	+(*)		
Locus of control and self-esteem; Aggressive behaviours, anxiety at age 10;			Blanden *et al.* (2006), Osborne Groves (2005a); Bowles *et al.* (2005); Bowles *et al.* (2002)	Non-cognitive abilities explain around 18% of the income transmission across generations (Blanden *et al.* 2006)
Health status				
Child birth-weight and height;	Significant	+(*)	Blanden *et al.* (2006); Eriksson *et al.* (2005); Case and Paxson (2006a); Case *et al.* (2004)	Conditioning on parental health status increase earnings mobility by 27% for sons (Eriksson *et al.* 2005)
Child's Mental illness; Parental health problems such as cancer, chronic bronchitis, asthma, allergy	Significant and large	-(*)		
Family size and structure	(few studies)		Grawe (2005a); Lindahl (2002); Mazumder (2001); Rumberger (2006); Harding *et al.* (2005); Björklund *et al.* (2004); Anderson and Leo (2006); Björklund and Chadwick (2003)	Intergenerational elasticity is up to 14% higher than the average elasticity for first-born children (Lindahl 2002). Also, sons of divorced couples are less mobile than their pers from intact families; differences in educational attainment play an important role in explaining the variations in earnings correlations conditional on divorce (Björklund and Chadwick 2003)
Unique children		-		
Later born siblings	Significant	+		
Single parent	Significant	+		
Divorced parents	Significant	_		
Assortative mating	Large and significant	-	Lam and Schoeni (1993); Chadwick and Solon (2002); Harding *et al.* (2005); Hirvonen (2006); Holmlund (2006); Ermisch *et al.* (2006); Blanden (2005b); and Blenden (2005c)	The higher the degree of assortative mating, the lower is mobility. Ernisch *et al.* (2006) show that in the United Kingdom, on average, about 40-50% of the covariance between parent's and own permanent family income can be attributed to the person to whom one is married.
Labour market attachment such as time spent not in education or in unemployment	Large and significant	-(*)	Blanden *et al.* (2006)	Explains a significant part of income and earnings mobility and significantly decreases sons' earnings.
Migrant status	Significant	-	Bauer (2006); Card *et al.* (2005); Borjas (2004); Hertz (2005a); Aydemir *et al.* (2006)	In Canada, differences in the extent of intergenerational income mobility of natives and immigrants are very small; in the United States, Sweden, Switzerland, mobility is higher among natives

Variable	Effect Size	+/-	Examples	
Policies Educational (such as shifting the age at which the ability of students are streamed, or subsidizing education)	Large and significant	+	Pekkarinen *et al.* (2006); Holmlund (2006); Hanushek *et al.* (2004); Seshadri and Yuki (2004); Oreopoulous *et al.* (2006)	The Finnish reform of education of 1972-1977, which shifted the age at which ability were streamed (from 10 to 16) and imposed a uniform academic cirriculum, has implied, approximately, a 20% decrease in the intergenerational elasticity from the pre-reform average of 0.30 (Pekkarinen *et al.*, 2006)
Reducing income labour taxes on the poor	Unclear		Hendricks (1999)	

Note: The third column reports the direction of the effect on intergenerational income mobility that is associated with the variable reported in the first column. A negative sign implies that the variable negatively affects the extent of intergenerational mobility (i.e. mobility is lower and intergenerational income elasticity is higher); a positive sign implies that the variable positively affects the extent of intergenerational income mobility (i.e. mobility is higher and the intergenerational income elasticity lower). An asterisk (*) next to the +/- sign inplies that the effect reported is on the son's earnings. Indeed, while in many situations effects on son's earning and on intergenerational earnings mobility are in the same direction, in other situations this association is not straightforward. For example, a negative effect of the unemployment rate (at the time of his birth) on son's earnings does not necessarily imply that the relation between son's and father's earnings is weakened or strengthened. Indeed, the elasticity ß simply represents the extent to which **income differences with respect to the average** in the parent's generation are passed on to the offspring's geneartion.

Source: Anna Christina d'Addio, *Intergenerational transmission of disadvantage* (OECD, 2007), 49-50.

ENDNOTES

1. Bernard Hickey, "English eyes major data centric reforms to Budget reporting after the election," Interest.co.nz, accessed August 25 2015, http://www.interest.co.nz/news/70314/english-eyes-major-data-centric-reforms-budget-reporting-afer-election.
2. While there is limited evidence of the effectiveness of past policies on reducing persistent poverty, researchers have investigated the effectiveness of the tax and benefit system on reducing the incidence and severity of income poverty in New Zealand. See, for example, Bob Stephens, Charles. Waldegrave and Paul Frater, "Measuring Poverty in New Zealand" (1995).
3. Kieran Madden, *The Heart of Poverty: Defining and measuring what it means to be poor in New Zealand* (2014); Kieran Madden, *The Heart of Poverty: Matching passion with precision for struggling New Zealanders* (2015).
4. Ministry of Social Development, "Green Paper for Vulnerable Children" (2012).
5. Wicked Problems, generally: are difficult to clearly define; have many interdependencies and are often multi-causal; are often not stable; have no clear solution; are socially complex; hardly ever sit conveniently within the responsibility of any one organisation; involve changing behaviour; are sometimes characterised by chronic policy failure; and attempts to address them often lead to unforseen circumstances. Lynelle Briggs, "Tackling Wicked Problems, A Public Policy Perspective" (Australian Public Service Commission, 2007).
6. Expert Advisory Group, *Working Paper no 3: What causes child poverty? What are the consequences? An economic perspective* (2012), 2. For a discussion on the effectiveness of income vis á vis in-kind benefits, see Douglas Almond and Janet Currie "Human Capital Development Before Age Five: NBER Working Paper No. 15827" (2010).
7. Older New Zealanders are not the focus of this paper, as they are, relatively speaking, better off than other demographics. The Ministry of Social Development, however, predict trouble in the future because "rates of home ownership are falling and hardship is increasing among older working-age people…[t]his indicates that in the future more older New Zealanders may face constrained living standards, as well as greater health and housing needs. "Briefing to the Incoming Ministers," (2014), 31.
8. Perry, *Household incomes in New Zealand*, 117. This increased poverty risk is largely attributable to children introducing additional needs to the family whilst at the same time reducing the time parents' have to commit to work
9. Much of the literature focuses on "child poverty," but we prefer to use the term "family poverty" as it better captures the existence of relationships within and across families. When the term "child poverty" is used here, it is shorthand for families with children whose incomes fall below a certain threshold. For more on terminology, see, Perry, *Household incomes in New Zealand*, 94. For a broader perspective on family and whanāu wellbeing, including conceptual frameworks and indicators, see SuPERU, Families and Whanāu Status Report 2015 (2015).
10. For work exploring the links between poverty/inequality and macroeconomic conditions, see Markus Jäntti & Stephen Jenkins, "The impact of macroeconomic conditions on income inequality." *The journal of economic inequality* 8, no. 2 (2010): 221-240, Craig Gunderse and James Ziliak. "Poverty and macroeconomic performance across space, race, and family structure." *Demography* 41, no. 1 (2004): 61-86.
11. This is not to dismiss these factors, as the nature of the benefit system and incentives play a key role in determining market and disposable income, for example. Rather, they will be examined in further detail in a future paper.
12. W. Phillips. Shively, *The craft of political research* (Pearson Higher Ed, 2012), 23-24.
13. As Nobel laureate Herbert Simon described it: "nothing is more fundamental in setting our research agenda and informing our research methods than our view of the nature of human being whose behavior we are studying…It makes a difference to research, but it also makes a difference for the proper design of…institutions." Herbert Simon, "Human nature in politics: The dialogue of psychology with political science," *American Political Science Review* 79, no. 02 (1985), 303.
14. Christian Smith, What Is a Person? Rethinking Humanity, Social Life, and the Moral Good from the Person Up (University of Chicago Press, 2010), 21-22.
15. For an overview of the relationship between income and outcomes, see section F in Bryan Perry, *The material wellbeing of New Zealand households: trends and relativities using non-income measures, with international comparisons*, (2015), 51-56.
16. Housing may fall under both financial (accommodation supplement) and in-kind (housing NZ home).
17. As Bryan Perry puts it, "household income is taken to be either an imperfect but readily available and very important indicator of the "consumption possibilities" for a household, or as an indicator that allows comparisons of the potential living standards of households, all else assumed equal." Perry, Household incomes in New Zealand, 8. While some findings are sensitive to particular measurements used, most trends over time remain similar. New Zealand Superannuation can cause issues with median measurements, however. For more on the "pensioner spike" see Perry, *Household Incomes in New Zealand*, 29, 137.
18. For a discussion on the relationship between multidimensional words and unidimensional measures such as income, see Shively, *The Craft of Political Research*, 35-37
19. A discrete investigation into the causes of hardship would be worthwhile, however, it would constitute a separate paper and would be reliant on a growing, yet relatively limited, literature base.
20. New Zealand Treasury, *A descriptive analysis of income and deprivation in New Zealand* (2012) 3. See also Bryan Perry, *Measuring and monitoring material hardship for New Zealand children: MSD research and analysis used in advice for the Budget 2015 child hardship package* (2015) 30.
21. Brienne Hastie. "Linking cause and solution: Predicting support for poverty alleviation proposals," *Australian Psychologist* 45, no. 1 (2010): 16-28.
22. Margaret Whitehead, "A typology of actions to tackle social inequalities in health" Journal of Epidemiology and Community Health, 61:473–478 (2007) cited in Penelope Carroll et. al. "The widening gap: perceptions of poverty and income inequalities and implications for health and social outcomes." *Social Policy Journal of New Zealand* 37 (2011): 113.
23. Adapted from Dorota Lepianka, Wim Van Oorschot, and John Gelissen,"Popular explanations of poverty: A critical discussion of empirical research." *Journal of Social Policy* 38, no. 03 (2009): 423, 427 and Rebecca M. Blank "Selecting among anti-poverty policies: can an economist be both critical and caring?" *Review of Social Economy* 61, no. 4 (2003): 447-469.) See also, Joe R. Feagin, "Poverty: We still believe that God helps those who help themselves." *Psychology today* 6, no. 6 (1972): 101-110.
24. Carroll et al, The Widening Gap, 117.
25. Emily Rose et al. "Social Values: A Report from the New Zealand Values Study 2005." (Massey University: 2005). See also, Carroll et al, The Widening Gap.
26. Rose et al, Social Values, 12; Carroll et al, The Widening Gap, 117.
27. Child Poverty Action Group, *New Zealanders' attitudes to child poverty*, Research Report (2014)

28. Sonia Sodha and William Bradley, *3D Poverty* (Demos, 2010). Alison Park, Miranda Phillips, and Chloe Robinson, *Attitudes to poverty: findings from the British Social Attitudes survey*. (Joseph Rowntree Foundation, 2007).
29. Arthur Grimes, Robert MacCulloch and Fraser McKay, *Indigenous Belief in Just World: New Zealand Māori and other Ethnicities Compared*, Motu Working Paper 15-14 (Motu, 2015), 24.
30. Emily Garden et al., Speaking for Ourselves: The truth about what keeps people in poverty from those who live it (Auckland City Mission, 2014)
31. See literature on behavioural economics for more on this intersection, for example, Richard H. Thaler, *Misbehaving: The Making of Behavioral Economics* (W. W. Norton & Company, 2015).
32. For seminal work on the intersection between history and biography, see C. Wright Mills, *The Sociological Imagination* (1959).
33. Economics and sociology place different emphases on these two interrelating factors. As economist James Duesenberry wryly describes it: "economics is all about how people make choices; sociology is all about why they don't have any choices to make." James Duesenberry, "Comment on An economic analysis of fertility," *Demographic and economic change in developed countries* (1960): 233.
34. Susan E. Mayer, *The influence of parental income on children's outcomes*, (Ministry of Social Development, 2002), 6.
35. Jonathan Boston and Simon Chapple, *Child Poverty in New Zealand* (2014), 48, 262-263. See also Expert Advisory Group on Solutions to Child Poverty (EAG), Working Paper no.2: Life course Effects on Childhood Poverty (Office of the Children's Commisioner, 2012), 2 for another comprehensive list of studies.
36. For a discussion on what statistics can say about causation, see Paul Holland (1986) "Statistics and Causal Inference," *Journal of the American Statistical Association*, 81, no. 396, 945-60.
37. Shively, *The craft of political research*, 77-78.
38. Ariel Kalil, "Family resilience and good child outcomes: A review of literature" (MSD, 2003): 38.
39. Shively, *The craft of political research*, 78.
40. John Goldthorpe "Causation, statistics, and sociology." *European sociological review* 17, no. 1 (2001): 1-20. We will look at these theories below. For an excellent example of research that tests a causal theory at the individual level (in this case the hypothesis that income inequality causes poor outcomes through "status anxiety"), see Richard Layte & Chistopher T. Whelan, "Who feels inferior? A test of the status anxiety hypothesis of social inequalities in health." *European Sociological Review* 30, no. 4 (2014): 525-535.
41. Randomised controlled Experiments are inherently difficult to implement in New Zealand due to relatively small geographical size and population.
42. For an overview of recent experimental evidence, see Boston and Chapple, *Child Poverty in New Zealand*, 51-54.
43. Stephen Gorard, Beng Huat See and Peter Davies, *The impact of attitudes and aspirations on educational attainment and participation* (Joseph Rowntree Foundation, 2012), 6. For a similar perspective, see Goldthorpe, "Causation, statistics, and sociology," for an outline of the types of evidence required, namely: robust dependence, consequential manipulation and tests of the generative process.
44. Gibb et al., "Early Motherhood and Long-Term Economic Outcomes: Findings from a 30-Year Longitudinal Study," *Journal of Research on Adolescence* 25, no. 1 (2015): 163-172.
45. There was insufficient data to track the impact of early fatherhood
46. Gibb et al., "Early Motherhood and Long-Term Economic Outcomes," 170.
47. Gibb et al., "Early Motherhood and Long-Term Economic Outcomes," 168 (P values ommitted from citation). A wide range of additional covariate factors were added to the model but were found to be insignificant, suggesting that the family background and early life circumstances were relatively comprehensive. Different cut-off points (ages 19, 22 and 25) were also tested but didn't alter the results significantly.
48. Gibb et al., "Early Motherhood and Long-Term Economic Outcomes," 163.
49. Gibb et al., "Early Motherhood and Long-Term Economic Outcomes," 171.
50. Gibb et al., "Early Motherhood and Long-Term Economic Outcomes," 169-170.
51. Gibb et al., "Early Motherhood and Long-Term Economic Outcomes," 171.
52. Kalil, "Family resilience and good child outcomes: A review of literature," 38.
53. Kristin Moore et al., "Age at first child- birth and later poverty," *Journal of Research on Adolescence*, 3, 393–422 cited in Gibb et al (2014) "Early Motherhood and Long-Term Economic Outcomes," 171.
54. Shively, *The craft of political research*, 76.
55. The notion of equivalised income is important to grasp. When comparing families of different sizes and compositions the income needs to be adjusted because larger families have greater needs than smaller families (and also also greater economies of scale). If incomes were not equivalised, relative comparisons would not be meaningful. See Perry, *Household incomes in New Zealand*, 9-11 for more on equivalisation.
56. For more information on SoFIE, see Perry, *Household incomes in New Zealand*, 168.
57. Stephen P. Jenkins, *Changing fortunes: income mobility and poverty dynamics in Britain* (OUP, 2011).
58. Treasury believes that this mobility seems unlikely to be related to "retirements or entry from education as the pattern was essentially the same for the 25 to 55 age-group," a population that avoids those life changes. New Zealand Treasury, *A descriptive analysis of income and deprivation in New Zealand*, 8.
59. Jenkins, *Changing fortunes.*
60. The income measure used here is "gross equivalized household income before tax but after benefits have been paid (including tax credits)." New Zealand Treasury, *A descriptive analysis of income and deprivation in New Zealand*, 17
61. It cannot be assumed that they did not move during that period, however. Kristie Carter, Penny Mok and Trinh Le, *Income Mobility in New Zealand: A Descriptive Analysis: New Zealand Treasury Working Paper 14/15* (2014), 15-16. For comparable Australian figures, see Roger Wilkins ed., *Families, Incomes and Jobs, Volume 9: A Statistical Report on Waves 1 to 11 of the HILDA Survey* (University of Melbourne, 2011).

62. Longer studies of this nature (such as the 16 year UK study) have generally found that mobility is reasonably constant through the economic cycle. See New Zealand Treasury, A descriptive analysis of income and deprivation in New Zealand, 17. For a comparison with Australia and the United Kingdom, see New Zealand Treasury, A descriptive analysis of income and deprivation in New Zealand, 21. Where differences in persistence arise across countries, research suggests that demographic factors play a role—having more families with children, for example—but "differences in the poverty-generating process" are behind most of the variation. Jenkins, *Changing fortunes*. 329. Countries with higher poverty rates using static measures also tend to have higher rates of persistent and recurrent poverty using dynamic measures." See also OECD, Doing Better for Children, 152-158; Ballantyne et al, *Movements Into and Out of Child Poverty in New Zealand* 23-28.

63. Stephen P. Jenkins, Richard Berthoud and Jonathan Burton, *Income and poverty: the rubber band theory* (Institute for Social and Economic Research, 2008): 2 cited in Jenkins, Changing Fortunes, 361.

64. For a philosophical argument for focussing our collective efforts on reducing poverty rather than broader inequality, see Harry Frankfurt, *On Inequality* (Princeton University Press, 2015).

65. John Hills, *Good times, bad times: The welfare myth of them and us* (Policy Press, 2014). See also Jenkins, *Changing fortunes*, 363, Noel Smith, and Sue Middleton, *A review of poverty dynamics research in the UK* (Joseph Rowntree Foundation, 2007), 1.

66. This illustration is taken from pioneering work on poverty dynamics by Mary Jo Bane and David T. Ellwood, *Slipping into and out of poverty: The dynamics of spells* (1983), 11-12.

67. Bruce Bradbury, Stephen P. Jenkins and John Micklewright, eds. *The dynamics of child poverty in industrialised countries* (Cambridge University Press, 2001), 1.

68. Benefit receipt operates in a similar manner. See Centre for Social Research and Evaluation, *Who uses the benefit system and for how long?* (MSD, 2010), Susan Morton et al., Growing Up in New Zealand, Now We Are Two: Describing our first 1000 days (2014), 43.

69. OECD, *Growing Unequal* (2008) 157. See also Ruud Muffels, Didier Fouarge and Ronald Dekker, *Longitudinal Poverty and Income Inequality: A Comparative Panel Study for the Netherlands, Germany and the UK*, OSA Working Paper WP2000-6 (2000)

70. New Zealand Treasury, Improving outcomes for children – *Initial Views on Medium-term Policy Directions, Report to the Ministerial Committee on Poverty*, (2013), 9

71. Jenkins, *Changing fortunes*, 363.

72. New Zealand Treasury, *A descriptive analysis of income and deprivation in New Zealand*, 10.

73. OECD (2008), *Growing Unequal*, 156.

74. Jenkins, *Changing fortunes*, 326.

75. New Zealand Treasury, *A descriptive analysis of income and deprivation in New Zealand*, 22.

76. Howard Oxley, D. Thai-Thanh, and Pablo Antolín, *Poverty dynamics in six OECD countries: OECD Economic Studies (2000) cited in Smith and Middleton, A review of poverty dynamics research in the UK*, 3.

77. Carter, Mok and Le, *Income Mobility in New Zealand: A Descriptive Analysis*, 18. See also Perry, Household incomes in New Zealand, 167-180.

78. This is referred to as "chronic poverty" in the literature. Perry, *Household incomes in New Zealand*, 178.

79. Using 60% of the median, after housing costs (AHC). OECD, *Economic Surveys: New Zealand 2015* (2015), 119. Boston and Chapple note that these figures may underestimate the persistence of poverty, as SoFIE uses net rather than gross income data, which are "likely to be less volatile." *Child Poverty in New Zealand*, 45.

80. New Zealand Treasury, *Improving Outcomes for Children*, 9.

81. Jenkins, *Changing fortunes*, 355. To clarify, the "state" here refers to away of being/status, rather than the government.

82. Kristie Carter and Fiona Imlach Gunasekara, *Dynamics of Income and Deprivation in New Zealand, 2002-2009: A Descriptive analysis of the Survey of Family, Income and Employment (SoFIE)* (University of Otago, 2012), 9.

83. Department of Work and Pensions, *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults* (2014), 98.

84. Smith and Middleton, *A review of poverty dynamics research in the UK*, 44. See also Bane and Ellwood, *Slipping into and out of poverty: The dynamics of spells*, OECD, *Growing Unequal*, 165.

85. For more on the cumulative impact of low income on deprivation, see Perry, *The material wellbeing of New Zealand households*, 56. For the intergenerational impact, see Greg J. Duncan and Katherine Magnuson, "The importance of poverty early in childhood." Policy Quarterly 9, no. 2 (2013): 12-17.

86. UK Department of Work and Pensions, *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults*, 9.

87. Simon Chapple and Dominic Richardson, *Doing better for children* (OECD, 2009), 168.

88. This twin focus on poverty persisting in families now and in the future is based on and draws heavily work by the UK Department of Work and Pensions: *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults.* Comparable New Zealand data is limited, however, the levels and trends of income persistence and mobility are broadly comparable to other international studies. Britain's child poverty dynamics, at least within lifetimes, were also found to have the closest resemblance to New Zealand's when compared to a host of European countries. See: Carter, Mok and Le, *Income Mobility in New Zealand: A Descriptive Analysis*, 1; and Suzie Ballantyne et al., *Movements Into and Out of Child Poverty in New Zealand: Results from the Linked Income Supplement* (Motu, 2003), 28. The authors cautions that this likeness could be partly attributed to similarities in weekly survey methodology shared between New Zealand and Britain. Longitudinal data will be used where possible (sometimes only point-in-time data is available).

89. Smith and Middleton, *A review of poverty dynamics research in the UK*, 5.

90. Jonathan Bradshaw et al., "The drivers of social exclusion," (UK Social Exclusion Unit, 2004). See Jenkins, *Changing fortunes*, chapters 10 and 11 for multivariate analysis on at-risk groups.

91. For an overview on clustering and disadvantage, see Jonathan Wolff and Avner De-Shalit, *Disadvantage* (Oxford University Press, 2013). See also Susan Morton et al., *Growing Up in New Zealand - Vulnerability Report 1: Exploring the definition of vulnerability for children in their first 1000 days* (2014), 61. The risk factors that the authors refer to are for "vulnerability," but the relationship holds for poverty and poor outcomes as well.

92. Smith and Middleton, *A review of poverty dynamics research in the UK*, 66.

93. New Zealand Treasury, Improving outcomes for children, 3, 10. Conversely, short spells of low income are unlikely to lead to hardship. On Multiple disadvantage, see John Jensen, Sathi Sathiyandra, and Morna Matangi-Want, "The 2004 New Zealand Living Standards Survey: What does it signal about the importance of multiple disadvantage?" *Social Policy Journal of New Zealand* 30 (2007): 132-134

94. New Zealand Treasury, *A descriptive analysis of income and deprivation in New Zealand*, 26.

95. "In a similar way, Coffield and colleagues also rejected the idea of a 'cycle of deprivation' preferring … the metaphor of a 'web of deprivation' – which, they argued, better characterised the 'dense network of psychological, social, historical and economic factors that either created or perpetuated problems' for the families they studied." Frank Coffield et al., *A cycle of deprivation? a case study of four families*, 1980. See also Tom MacInnes et al., *Monitoring poverty and social exclusion* (Joseph Rowntree Foundation, 2015) 16-17.

96. Low income here refers to: "income that is less than 60% of median pre-tax equivalised household income in that year." New Zealand Treasury, *A descriptive analysis of income and deprivation in New Zealand*, 6.

97. Over the past twenty years, the risk ratio for sole parents has risen while it has dropped for couple parent households and other family types with children. Perry, *Household incomes in New Zealand*, 118. Sole parents also tend to have lower mobility than other families. New Zealand Treasury, *A descriptive analysis of income and deprivation in New Zealand*,16.

98. Laura Adelman and Andreas Cebulla, *The dynamics of poverty and deprivation in the UK* (2003), 142; Smith and Middleton, *A review of poverty dynamics research in the UK*, 78, 86.

99. Smith and Middleton, *A review of poverty dynamics research in the UK*.

100. Matthew Gibbons, *Income and Occupational Intergenerational Mobility in New Zealand: Treasury Working Paper 10/06* (2010), 8.

101. Stephen P. Jenkins, John A. Rigg, and Francesco Devicienti, *The dynamics of poverty in Britain*, (Department of Work and Pensions, 2001), Table 4.9. See also Jenkins, Changing Fortunes, 325-327.

102. Superu, *Family Resilience: In Focus* (2015), 9-10.

103. For a good summary of family resilience as a concept, see Superu, *Family Resilience* (2015), Michael Rutter, "Resilience as a dynamic concept," *Development and psychopathology* 24, no. 02 (2012): 336 and Michael Rutter, "Implications of resilience concepts for scientific understanding." *Annals of the New York Academy of Sciences* 1094, no. 1 (2006): 1-12.

104. Joyce Arditti, "Introduction and conceptual overview" in Joyce Arditti ed., *Family Problems: Stress, Risk and Resilience* (Wiley-Blackwell, 2015), 1–14.

105. Superu, *Perceptions of income adequacy by low income families* (2015), 3.

106. Superu, *Perceptions of income adequacy by low income families*, 26. Being solely reliant on a benefit, losing a job or partner were negatively associated with income adequacy. The authors note that their research was tentative as "identified factors associated with reported income adequacy, but these are not necessarily causal factors that lead to better (or worse) economic resilience." Additional research is required to support stronger claims.

107. Alfred Baldwin, Clara Baldwin and Robert Cole, "12 Stress-resistant families and stress-resistant children," in Dante Cicchetti et al. eds. *Risk and protective factors in the development of psychopathology* (Cambridge University Press, 1992).

108. Jenkins, *Changing Fortunes*, 361.

109. See Stephen P. Jenkins, Christian Schluter and Gert Wagner, *Child poverty in Britain and Germany* (2001) for early work on trigger events pulling families out of poverty. See also DiPrete & McManus (2006) and Ballantyne et al., *Movements Into and Out of Child Poverty in New Zealand*, 9; and Bane and Ellwood, *Slipping into and out of poverty: The dynamics of spells*, 4 cited in Jenkins, Changing Fortunes, 239 for early work in the area of poverty dynamics and trigger events.

110. Smith and Middleton, *A review of poverty dynamics research in the UK*, 37.

111. Peter Kemp et al., *Routes out of poverty* (Joseph Rowntree Foundation, 2004).

112. EAG, Working Paper no.3: Life course Effects on Childhood Poverty (Office of the Children's Commisioner, 2012), 5; Jenkins, *Changing Fortunes*, 361.

113. Greg Duncan et al., "Poverty dynamics in eight countries." *Journal of Population Economics* 6, no. 3 (1993): 215-234.

114. Ballantyne et al., *Movements Into and Out of Child Poverty in New Zealand*.

115. Primarily because this dataset wasn't designed for this application, there are several other limitations. See Ballantyne et al., *Movements Into and Out of Child Poverty in New Zealand*, 12-13 for more.

116. Ballantyne et al., *Movements Into and Out of Child Poverty in New Zealand*, 41.

117. Jenkins, *Changing Fortunes*, 364, chapters 10 and 11.

118. Jenkins, Rigg, and Devicienti, *The dynamics of poverty in Britain* cited in Kemp et al., *Routes out of poverty*, 11-12.

119. Kristie Carter and Fiona Imlach Gunasekara, *Dynamics of Income and Deprivation in New Zealand*, 2002-2009,18.

120. Suzie Ballantyne et al., "Triggering movements into and out of child poverty: A comparative study of New Zealand, Britain and West Germany," *Social Policy Journal of New Zealand* (2004): 93.

121. Ballantyne et al., "Triggering movements into and out of child poverty: A comparative study of New Zealand, Britain and West Germany."

122. Only couple households' entries are considered here because there wasn't a large enough sample of sole parent households who were not poor to produce statistically significant results.

123. Ballantyne et al., "Triggering movements into and out of child poverty: A comparative study of New Zealand, Britain and West Germany," 93.

124. EAG, *Working Paper* no.3, 6.

125. EAG, *Working Paper* no.3, 6.

126. Smith and Middleton, *A review of poverty dynamics research in the UK*, 39. 75. Jenkins, Changing Fortunes, 361.

127. Jenkins, *Changing Fortunes*, 364; Ballantyne et al., *Movements Into and Out of Child Poverty in New Zealand*, 9.

128. Miles Zyblock, Garnett Picot, and Wendy Pyper, *Why do children move into and out of low income: changing labour market conditions or marriage and divorce?* (Statistics Canada, 1999).

129. Jenkins, Rigg, and Devicienti, *The dynamics of poverty in Britain*.

130. Jenkins, *Changing Fortunes*, 258, 361.

131. Jenkins, *Changing Fortunes*, 261, 361

132. Smith and Middleton, *A review of poverty dynamics research in the UK*, 39.

133. Jenkins, *Changing Fortunes*, 361.

134. Jensen et al, *New Zealand Living Standards 2004 – An Overview* (MSD, 2006), 22.

135. Jensen et al, *New Zealand Living Standards 2004*, 8-9. These effects remain even when other related factors are controlled for. See also Jensen et al., *The 2004 New Zealand Living Standards Survey: What does it signal about the importance of multiple disadvantage?* Appendix for the regression model data. Gary Evans, Dongping Li and Sara Sepanski Whipple, "Cumulative risk and child development," Psychological Bulletin 139, no. 6 (2013): 1342.

136. McLeod et al., *Using Integrated Administrative Data to Identify Youth Who Are at Risk of Poor Outcomes as Adults, Analytical Paper 15/02* (New Zealand Treasury, 2015). Because the work published in this space so far focuses on broader disadvantage rather than poverty, the findings are more indicative than instructive for poverty research.

137. Claudia Wood et al., *Poverty in Perspective* (Demos, 2012), 14.

138. OECD, *Growing Unequal*, 168.

139. Jenkins, Schluter and Wagner, *Child poverty in Britain and Germany*, 11.

140. Jenkins, *Changing Fortunes*, 243.

141. The same complication arises with living standards and life shocks. Jensen et al, *New Zealand Living Standards 2004*, 22.

142. Jenkins, Rigg, and Devicienti, *The dynamics of poverty in Britain*. For New Zealand health data and life shocks. See Jensen et al, *New Zealand Living Standards 2004*, 21.

143. Smith and Middleton, *A review of poverty dynamics research in the UK*, 43

144. UK Department of Work and Pensions, *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults*, 6.

145. UK Department of Work and Pensions, *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults*, 6.

146. UK Department of Work and Pensions, *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults*, 21-22, 57. This is because defining and measuring "low wages" is fraught with difficulty, so number of hours or part-time/contract work are usually used in the literature as a proxy indicator. The authors note that the sources used in the UK Department of Work and Pensions report tended "to refer to the impact of working a lower number of hours (or part time) on the risk of experiencing poverty, rather than the impact of low-paid work per se." The number of "working poor" in New Zealand suggests that low wages in conjunction with low hours is a problem here.

147. UK Department of Work and Pensions, *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults*, 30-35.

148. UK Department of Work and Pensions, *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults*, 58, citing Arulampalan et al.

149. Tracy Shildrick et al., *The low-pay, no-pay cycle: Understanding recurrent poverty* (Joseph Rowntree Foundation, 2010).

150. UK Department of Work and Pensions, *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults*, 21.

151. Laura Adelman, Sue Middleton, and Karl Ashworth, *Britain's poorest children: severe & persistent poverty and social exclusion* (2003) cited in UK Department of Work and Pensions, *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults*, 26.

152. Lester Coleman and Fiona Glenn, "The varied impact of couple relationship breakdown on children: implications for practice and policy" *Children & Society* 24, no. 3 (2010): 238-249.

153. Stock et al., *Personal Relationships and Poverty: An Evidence and Policy Review* (2014), 28.

154. Jenkins, *Changing Fortunes*.

155. Ministry of Social Development, "Benefit Fact Sheets," accessed September 20 2015. https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/statistics/benefit/index.html.

156. Mayer, *The influence of parental income on children's outcomes*, 66.

157. Glen Elder Jr., "Time, human agency, and social change: Perspectives on the life course." *Social psychology quarterly* (1994): 4-15.

158. Glen Elder Jr., "Time, human agency, and social change: Perspectives on the life course;" Timothy Daaleman and Glen Elder Jr., "Family medicine and the life course paradigm," *The Journal of the American Board of Family Medicine* 20, no. 1 (2007): 87.

159. Anna Christina d'Addio, *Intergenerational transmission of disadvantage* (OECD, 2007), 11. Empirical evidence supports this claim, citing research that suggests that people's responsibilities for both their parents and their children will constrain and influence them when making decisions such as moving home. Adrian Bailey, Megan Blake and Thomas Cooke, "Migration, care, and the linked lives of dual-earner households." Environment and Planning A 36, no. 9 (2004): 1617-1632. Parent's decisions are, more often than not, made in the best interests of the children For more parent's decisions and core values, see Superu, Families and Whanāu Status Report (2015), 22.

160. d'Addio, *Intergenerational transmission of disadvantage*, 4.

161. d'Addio, *Intergenerational transmission of disadvantage*, 68. On the influence of genetics, research suggests that the earnings of identical twins are significantly more similar than those of fraternal twins, suggesting a large role for genetics as a transmission mechanism. The role played by inheritance of IQ in particular appears to be less influential, however. Samual Bowles and Herbert Gintis, "The inheritance of inequality," *The Journal of Economic Perspectives* 16, no. 3 (2002): 3-30.

162. On the different types of capital, see Pierre Bourdieu, "The forms of capital" *Cultural theory: An anthology* (2011): 81-93. The literature on assets, resources and capitals is complex and contested. For an analysis of this see Mike Savage, Alan Warde and Fiona Devine. "Capitals, assets, and resources: some critical issues," *British Journal of Sociology* 56 no.1 (2005): 31–47. For a critical perspective of Bourdieu's Cultural Capital, see John H. Goldthorpe, "Cultural Capital: Some Critical Observations," *Sociologica* 1, no. 2 (2007).

163. For a differing perspective on Social Capital based on trust and reciprocity, see Robert D. Putnam, "Bowling alone: America's declining social capital," *Journal of democracy* 6, no. 1 (1995): 65-78.

164. There is a significant and technical literature on Intergenerational income mobility. Definitional and measurement issues are important but not the focus of this paper. For overviews of the literature, see d'Addio, *Intergenerational transmission of disadvantage* and. Miles Corak, *Do Poor Children Become Poor Adults? Lessons from a Cross Country Comparison of Generational Earnings Mobility* (2006).

165. For a discussion on the relationship between intergenerational mobility, equality of opportunity and how differences in circumstances and personal choices affect them, see Miles Corak, "Income inequality, equality of opportunity, and intergenerational mobility," *The Journal of Economic Perspectives* 27, no. 3 (2013): 79-102. For research that controlled for relevant factors and found that there was a significant relationship, see Paolo Brunori, Paolo, Francisco Ferreira, and Vito Peragine, *Inequality of Opportunity, Income Inequality, and Economic Mobility: Some International Comparisons* (Palgrave Macmillan, 2013). For more on the relationship between equality of opportunity and intergenerational earnings elasticity, see d'Addio, *Intergenerational transmission of disadvantage*, 13 and Mitnik et al., *New Estimates of Intergenerational Mobility Using Administrative Data* (2015) 4.

166. OECD (2008) *Growing Unequal*, 204. Many are concerned about the relationship between intergenerational mobility and income inequality, as higher income inequality points toward fewer opportunities for the disadvantaged. Brunori, Ferreira, and Peragine, *Inequality of Opportunity, Income Inequality, and Economic Mobility*, 17. See also Jenkins, *Changing Fortunes*, 119-120 for arguments about mobility and the public interest.

167. See discussion in Sandra Black and Paul Devereux, *Recent developments in intergenerational mobility*, (2010) 3-4. For an argument on "why a regime of 'perfect mobility' is not an appropriate benchmark for evaluating the extent to which a society offers its members social justice or equality of opportunity," See Adam Swift, "Would perfect mobility be perfect?" *European Sociological Review* 20, no. 1 (2004): 1-11.

168. d'Addio, *Intergenerational transmission of disadvantage)*, 11. See also, Joseph Fishkin, *Bottlenecks: A new theory of equal opportunity*, (OUP, 2014) for an extended discussion on the limitations of equality of opportunity.

169. Gary Solon, "Intergenerational mobility in the labor market," in David Card and Orley Ashenfelter eds., *Handbook of Labor Economics Vol. 3* (1999): 1761-1800.

170. Most studies study the relationship between the incomes of fathers and their sons.

171. Gibbons, *Income and occupational intergenerational mobility in New Zealand. Working Paper No. 10/06*. (New Zealand Treasury, 2010), 10, 41. Gibbons found the IGE for New Zealand to be 0.26, similar to Corak's figure. Caution is required with this finding using the Dunedin data, as the cohort at age 32 when this research was undertaken had not yet reached their peak earning years (late thirties-early forties)—many raising families. Dunedin also has fewer Māori and Pasifika people, so the results are not representative of ethnic diversity.

172. OECD Economic Surveys, NZ (2015), 121-2. Corak 2013 (see OECD source). See also, Gibbons (2010), 41

173. Gibbons, *Income and occupational intergenerational mobility in New Zealand*, 41.

174. OECD (2015), 121. This is based on a correlation between income inequality and intergenerational mobility.

175. Markus Jantti et al., *American exceptionalism in a new light: A comparison of intergenerational earnings mobility in the Nordic countries, the United Kingdom and the United States* (2006). d'Addio, *Intergenerational transmission of disadvantage* 37-39; Bernt Bratsberg et al. "Nonlinearities in Intergenerational Earnings Mobility: Consequences for Cross-Country Comparisons," *The Economic Journal* 117, no. 519 (2007). See also OECD, *Growing unequal*.

176. d'Addio, *Intergenerational transmission of disadvantage* 38-9. d'Addio cites several international studies that provide evidence of this intergenerational persistence of poverty. See also Stephen Gibbons and Jo Blanden, *The persistence of poverty across generations: A view from two British cohorts* (JRF, 2006).

177. For recent findings from the US, see Mitnik et al., *New Estimates of Intergenerational Mobility Using Administrative Data*, 4, 71.

178. UK Department of Work and Pensions, *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults*.

179. EAG, *Working Paper no.2: Life course Effects on Childhood Poverty*, 8.

180. Chapple and Richardson, *Doing better for children*, 168.

181. Sheree J. Gibb, David M. Fergusson and L. John Horwood. "Childhood family income and life outcomes in adulthood: findings from a 30-year longitudinal study in New Zealand," *Social Science & Medicine* 74, no. 12 (2012): 1979-1986.

182. Mayer, *The influence of parental income on children's outcomes*, 68.

183. Gordon B. Dahl and Lance Lochner, *The Impact of Family Income on Child Achievement: Evidence from the Earned Income Tax Credit* (2010), 23.

184. Matt Barnes, Anne Conolly and Wojtek Tomaszewski, *The circumstances of persistently poor families with children: Evidence from the Families and Children Study (FACS)* (Department of Work and Pensions, 2008) cited in UK Department of Work and Pensions, An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults, 103.

185. Matt Barnes, Anne Conolly and Wojtek Tomaszewski, *The circumstances of persistently poor families with children*.

186. Chapple and Richardson, *Doing better for children*, 168, citing Robert Haveman and Barbara Wolfe, "The determinants of children's attainments: A review of methods and findings." *Journal of economic literature* 33, no. 4 (1995): 1829-1878; Jeanne Brooks-Gunn and Greg J. Duncan. "The effects of poverty on children," The future of children (1997): 55-71; Mayer, *The influence of parental income on children's outcomes*; Stephen P. Jenkins and Christian Schluter, *The effect of family income during childhood on later-life attainment: evidence from Germany*, (2002) and Laura Blow. et al., *Parental Background and Child Outcomes: How Much Does Money Matter and What Else Matters?* (2005).

187. Sandra Black and Paul Devereux note that background factors tend to contribute more to the variance in intergenerational mobility in the US than in Nordic countries. Recent developments in intergenerational mobility, 70.

188. Greg J. Duncan, Katherine Magnuson and Elizabeth Votruba-Drzal, "Boosting Family Income to Promote Child Development," *The Future of Children*, Vol. 24, No. 1 (2014) 99-120; Pamela Morris, Greg J. Duncan and Christopher Rodrigues, "Does money really matter? Estimating impacts of family income on children's achievement with data from random-assignment experiments," (2004); Greg J. Duncan, Ariel Kalil and Kathleen M. Ziol-Guest, "Early childhood poverty and adult achievement, employment and health," *Family Matters 2013 No. 93* (2013); Duncan and Magnuson, "The importance of poverty early in childhood." Boston and Chapple, *Child Poverty in New Zealand show that early years are generally more important than teenage years*.

189. Katrine V. Løken, Magne Mogstad, and Matthew Wiswall. "What linear estimators miss: The effects of family income on child outcomes." *American Economic Journal: Applied Economics 4, no. 2* (2012): 1-35.

190. Boston and Chapple, *Child Poverty in New Zealand*, 49.

191. Joseph M. Boden, David M. Fergusson and L. John Horwood. "Pathways to economic outcomes at age 30: Income and living standards in a New Zealand birth cohort," *New Zealand Sociology 28, no. 3* (2013).

192. While a significant predictor, NZ residence omitted as we are focused on New Zealanders living in the country.

193. Closely related to benefit receipt.

194. For a detailed list of the strength of the associations, see Table 2 in Boden, Fergusson and Horwood, "Pathways to economic outcomes at age 30: Income and living standards in a New Zealand birth cohort," 117-119.

195. For a discussion of the limited overlap of income and hardship measures, see Perry, *The material wellbeing of New Zealand households*, 52-54.

196. This result could be from the use of family income rather than personal income as the dependent variable.

197. Another piece of work using the Christchurch study study suggested that childhood socio-economic status explained a significant difference in future outcomes between Māori and non-Māori —particularly low education and welfare dependence. But because a large proportion of this difference remained unexplained by economic factors, the authors concluded that "efforts to improve Māori well-being will require an approach that moves beyond a sole focus on rectifying socio-economic disadvantage. Dannette Marie, David M. Fergusson and Joseph M. Boden, "Childhood socio-economic status and ethnic disparities in psychosocial outcomes in New Zealand," *Australian and New Zealand journal of psychiatry* (2014).

198. Boden, Fergusson and Horwood, "Pathways to economic outcomes at age 30: Income and living standards in a New Zealand birth cohort,"120.

199. The Growing Up in New Zealand longitudinal survey administered by the University of Auckland in partnership with Superu will, when the cohort members get older, provide a rich and valuable source of data for future work in this area to complement the Christchurch and Dunedin studies.

200. Gibb, Fergusson and Horwood, "Childhood family income and life outcomes in adulthood."

201. Gibb, Fergusson and Horwood, "Childhood family income and life outcomes in adulthood."

202. David M. Fergusson, L. John Horwood and Sheree J. Gibb, "Childhood family income and later outcomes: results of a 30 year longitudinal study," *Children*, No.79 (Office of the Children's Commissioner, 2011), 26.

203. Figures derived by this method are indicative and should be compared with the unadjusted associations as the covariates may influence one another. See Gibb, Fergusson and Horwood, "Childhood family income and life outcomes in adulthood," 1983.

204. Gibb, Fergusson and Horwood, "Childhood family income and life outcomes in adulthood," 1984.

205. Gibbons, *Income and occupational intergenerational mobility in New Zealand*, 41.

206. Boston and Chapple, *Child Poverty in New Zealand*, 51.

207. Richie Poulton et al., "Association between children's experience of socioeconomic disadvantage and adult health: a life-course study," *The lancet* 360, no. 9346 (2002): 1640-1645.

208. Myron D. Friesen et al., "Living standards and material conditions of young New Zealand families." *Social Policy Journal of New Zealand* 33 (2008): 64.

209. Boston and Chapple, *Child Poverty in New Zealand*, Chapter 2. See Almond and Currie "Human Capital Development Before Age Five" for for a collated table of experimental studies with findings.

210. Chapple and Richardson, *Doing better for children*, 168.

211. Sean Coughlan, "Would $4,000 make poor children cleverer?" BBC News, accessed 23 August 2015 http://www.bbc.com/news/business-24821383.

212. For more on theories, see Shively, The craft of political research,15-17. For a critical realist perspective, see Smith, *What is a person?* 11.

213. Gibbons, Income and occupational intergenerational mobility in New Zealand. The author warns that this figure may be diminished if further individual and family background factors were added to the model.

214. Goldthorpe (2001), 4. See also Smith, *What is a person?* 299-304.

215. d'Addio, *Intergenerational transmission of disadvantage*, 40.

216. d'Addio, *Intergenerational transmission of disadvantage*, 40; Gibbons, *Income and occupational intergenerational mobility in New Zealand*, 24.

217. For an extended discussion on these three perspectives, Duncan, Magnuson and Votruba-Drzal, "Boosting Family Income to Promote Child Development," 102-7. See also Tim Maloney, "Are the outcomes of young adults linked to the family income experienced in childhood?" *Social Policy Journal of New Zealand* (2004): 58 and Gibb, Fergusson and Horwood, "Childhood family income and life outcomes in adulthood," 1985.

218. See Anandi Mani et al., "Poverty impedes cognitive function," *science 341*, no. 6149 (2013): 976-980 for a comprehensive theory and related evidence about how a lack of resources can cause mental and physical stress and, subsequently, poor outcomes.

219. OECD (2009), 170. See also Beck Taylor, Eric Dearing and Kathleen McCartney, "Incomes and outcomes in early childhood," *Journal of Human Resources* 39, no. 4 (2004): 980-1007; Lawrence Berger, Christina Paxman and Jane Woldfogel, *Income and Child Development: Center for Research on Child Wellbeing Working Paper* No. 05-16-FF (2005).

220. James Heckman and Stefano Mosso, The economics of human development and social mobility (National Bureau of Economic Research, 2014), 31.

221. James Heckman, "Skills and Scaffolding," accessed 29 August 2015, http://www.brookings.edu/research/papers/2014/10/22-skills-scaffolding-heckman.

222. d'Addio, *Intergenerational transmission of disadvantage*, 4.

223. Matt Barnes et al., *Intergenerational transmission of worklessness: Evidence from the Millennium Cohort and the Longitudinal Study of Young People In England* (2012) cited in UK Department of Work and Pensions, *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults*, 59.

224. Boden, Fergusson and Horwood, "Pathways to economic outcomes at age 30: Income and living standards in a New Zealand birth cohort," 126-7.

225. Jean Yeung, Miriam R. Linver and Jeanne Brooks–Gunn, "How money matters for young children's development: Parental investment and family processes," *Child development* 73, no. 6 (2002): 1874-6. Walking the line between including as few variables as possible in models to make sense of the findings while at the same time including enough to reflect reality well and to make accurate predictions where possible is difficult—a process characterised as a quest for "sufficient complexity." Smith, *What is a person*, 11. When it comes to theories about causes of poverty, simplistic, one-dimensional explanations will not be predictive or broadly applicable, leaving them of little use. An overly elaborate explanation will be just as worthless, capturing everything and explaining nothing.

226. Housing, for example, may be a more significant factor in New Zealand, with families spending comparatively significant proportions of their income on housing costs. For more on housing and child poverty, see Boston and Chapple, *Child Poverty in New Zealand*, 181-201.

227. UK Department of Work and Pensions, *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults*, 6.

228. Housing here refers to the quality of rather than the cost of housing. The rising proportion of household expenditure on housing in New Zealand (Auckland in particular) is of great concern. The quality of New Zealand housing stock is also a problem, and may be a greater causal factor here through a potential negative effect on children's health and subsequent future outcomes. See Boston and Chapple, *Child Poverty in New Zealand*. Perry, *Household incomes in New Zealand*.

229. Gibbons, *Income and occupational intergenerational mobility in New Zealand*.

230. Jo Blanden and Stephen Machin, "Educational inequality and the expansion of UK higher education," *Scottish Journal of Political Economy 51*, no. 2 (2004): 230-249; Jo Blanden, Paul Gregg and Lindsey Macmillan, "Accounting for Intergenerational Income Persistence: Noncognitive Skills, Ability and Education," *The Economic Journal 117*, no. 519 (2007).

231. Some argue that the return to education has flattened in recent years: that the historical link between education, productivity and earnings may be changing in response to globalisation. See Phillip Brown, Hugh Lauder and David Ashton, The global auction: The broken promises of education, jobs, and incomes (Oxford University Press, 2010).

232. Black and Devereux, *Recent developments in intergenerational mobility*.

233. UK Department of Work and Pensions, *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults*, 91.

234. David M., Fergusson, L. John Horwood, and Joseph M. Boden, "The transmission of social inequality: Examination of the linkages between family socioeconomic status in childhood and educational achievement in young adulthood," *Research in Social Stratification and Mobility 26*, no. 3 (2008): 290. The authors noted that the unexplained proportion of the relationship might be the result of the cumulative effect that income has on a number of outcomes.

235. Fergusson, Horwood and Boden, "The transmission of social inequality: Examination of the linkages between family socioeconomic status in childhood and educational achievement in young adulthood."

236. Superu, *Families and Whanāu Status Report*.

237. School readiness constitutes cognitive skills such as literacy, maths, and language. This particular study also included behavioural factors like conduct and attention. Jane Waldfogel and Elizabeth Washbrook, *Income-Related Gaps in School Readiness in the United States and the United Kingdom* (Russell Sage Foundation, 2011).

238. Maloney, "Are the outcomes of young adults linked to the family income experienced in childhood?" 74-5.

239. Maloney, "Are the outcomes of young adults linked to the family income experienced in childhood?" 74.

240. Jo Blanden, Paul Gregg and Lindsey Macmillan, "Accounting for Intergenerational Income Persistence," 17.

241. Catalina Gutierrez et al., "Does Employment Generation really matter for poverty reduction?: World Bank Policy Research Working Paper Series" (2007).

242. Kathryn Duckworth et al., *The relative importance of adolescent skills and behaviors for adult earnings: A cross-national study: Department of Quantitative Social Science Working Paper* (2012), 2.

243. Flavio Cunha, James Heckman and Susanne Schennach, "Estimating the technology of cognitive and noncognitive skill formation," *Econometrica 78*, no. 3 (2010): 883-931.

244. Cunha, Heckman and Schennach, "Estimating the technology of cognitive and noncognitive skill formation."

245. Duckworth et al (2012) *The relative importance of adolescent skills and behaviors for adult earnings: A cross-national study*, 2.

246. For more on the conceptual difficulties in this literature, or as the auther puts it, "scholarship on "non-cognitive factors" is a mess," see Richard V. Reeves, "Jingle-Jangle Fallacies for Non-Cognitive Factors," accessed September 12 2015, http://www.brookings.edu/blogs/social-mobility-memos/posts/2014/12/19-jingle-jangle-fallacies-noncognitive-factors-reeves.

247. Brooks-Gunn and Duncan, "The effects of poverty on children." Løken, Mogstad and Matthew Wiswall note that "While the IV estimates reported in Oreopoulos et al. (2005), Dahl and Lochner (2008) and Milligan and Stabile (2007) suggest some positive effects of family income on children's (short-run) outcomes, Shea (2000) and Løken (2010) find little, if any, impact of family income. Using FE estimation, both Duncan et al. (1998) and Levy and Duncan (2000) find that family income is important for children's educational attainment, whereas Blau (1999) and Dooley and Stewart (2004) find a small effect of family income on child outcomes." "What linear estimators miss," 1.

248. Gibbons and Blanden, The persistence of poverty across generations, 33. Evidence from the UK that compared two different cohorts separated by around twenty years suggested that the relative importance of childhood poverty on future outcomes has risen over time.

249. d'Addio, *Intergenerational transmission of disadvantage*, 26.

250. Samuel Bowles et al., Unequal Chances: Family Background and Economic Success (2005) cited in d'Addio, *Intergenerational transmission of disadvantage*, 26.

251. Boston and Chapple, *Child Poverty in New Zealand*, 55.

252. For more on the costs of child poverty, see Boston and Chapple, *Child Poverty in New Zealand*, 55-58.

253. Glen Elder Jr., *Life course dynamics: trajectories and transitions 1968-1980* (1985), 40.

254. Fishkin, Bottlenecks.

255. OECD, *OECD Employment Outlook 2001* (2001), 37.

256. Ballantyne et al., *Movements Into and Out of Child Poverty in New Zealand*, 40.

257. Ballantyne et al., *Movements Into and Out of Child Poverty in New Zealand*, 40.

258. See Productivity Commission (2015), More Effective Social Services

259. UK Department of Work and Pensions, *An evidence review of the drivers of child poverty for families in poverty now and for poor children growing up to be poor adults*, 6.

260. Smith and Middleton, *A review of poverty dynamics research in the UK*, 86.

261. EAG, Child Poverty in New Zealand, evidence for action (Office of the Children's Commissioner, 2012) 31.

262. For data on longer-term employment outcomes for people moving from a benefit to work, see Sylvia Dixon and Sarah Crichton, "The longer-term employment outcomes of people who move from a benefit to work," *Social Policy Journal of New Zealand 31* (2007). The authors write that "[e]mployment retention rates were found to be moderately high in the two-year follow-up period, but at any given time around one-third of those with jobs were earning less than $1,500 a month, indicating that they probably were not employed full-time or for a full month. Jobs also tended to be short in duration. More than half of the study group returned to a benefit during the follow-up period."

263. Donald Hirsch, Experiences of poverty and educational disadvantage (JRF, 2007) 3.

264. New Zealand Treasury, *Analysis of the Proposed $18.40 Living Wage* (2013), 3.

265. See, for example, the Warehouse's introduction of the Career Retailer's Wage: Claire Rogers, "Warehouse adopts 'career retailer wage'," accessed 20 October 2015, http://www.stuff.co.nz/business/industries/8641343/Warehouse-adopts-career-retailer-wage.

266. OECD, OECD Family Database, "LMF2.3 The distribution of working hours among adults in sole-parent households," accessed 20 October 2015, www.oecd.org/els/family/database.htm. Note: the latest available data was from 2013.

267. Ballantyne et al., *Movements Into and Out of Child Poverty in New Zealand*, 29-30.

268. Gordon Dahl et al., *What is the case for paid maternity leave?* (National Bureau of Economic Research, 2013); Willem Adema and Peter Whiteford, *Babies and bosses: reconciling work and family life: A synthesis of findings for OECD countries* (2007) cited in Boston and Chapple, Child Poverty in New Zealand, 149.

269. Isabel Sawhill, *Generation Unbound: Drifting Into Sex and Parenthood Without Marriage* (Brookings Institution Press, 2014), iv.

270. EAG, *Working Paper no.3 Life course Effects on Childhood Poverty*, 3.

271. Manning et al, *Healthy marriage initiative spending and U.S. marriage & divorce rates, a state-level analysis* (Bowling Green State University, 2014); Adam Sonfield, Kinsey Hasstedt, Megan L. Kavanaugh and Ragnar Anderson, T*he social and economic benefits of women's ability to determine whether and when to have children*, (2013).

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276. See Boston and Chapple, *Child Poverty in New Zealand*, 167-178 for a raft of recommendations to improve Child Support in New Zealand.

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278. Perry, *Household incomes in New Zealand*.

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281. Stock et al., *Personal Relationships and Poverty: An Evidence and Policy Review*, 5.

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